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Exploring the Relationship between Social Network Sites and the Consumption of Cultural Goods through the lens of Affordances

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Thesis Submitted to the National University of Ireland, Cork for the Degree of Doctor of Philosophy

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TABLE OF CONTENTS

TABLE OF CONTENTS II
LIST OF FIGURES V
LIST OF TABLES VII
ABSTRACT XI
ACKNOWLEDGEMENTS XIV
CHAPTER 1 INTRODUCTION 1
1.1 Introduction to Study 1
1.2 Rationale for Study 1
1.3 Research Objective and Research Questions 3
1.4 Key Contributions 5
1.5 Study Design 5
1.5.1 Research Process Stage One 6
1.5.2 Research Process Stage Two 7
1.5.3 Research Process Stage Three 8
1.5.4 Research Process Stage Four 9
1.6 Peer-reviewed Publications 10
CHAPTER 2 LITERATURE REVIEW 11
2.1 Introduction 11
2.2 The (Complimentary) Relationship of Social Media and Cultural Goods 14
2.2.1 What Constitutes a Cultural Good? 16
2.2.2 Social Media an Integral Aspect of Cultural Good Consumption 18
2.2.3 Music Consumption and Social Media 21
2.3 Social Media and Social Media Applications 22
2.3.1 What is Social Media? 22
2.3.2 Classification of Social Media Applications 24
2.3.3 Redefining Social Network Sites 28
2.4 Music Consumption 30
2.4.1 The Progression of Music Consumption 31
2.4.2 Music Consumers 35
2.4.3 Music Consumption Activities 36
2.5 Theoretical Lens 42
2.5.1 The Complexity of Social Media Use 43
2.5.2 Justifying Affordances 47
2.5.3 Defining Affordances 51

2.5.4 Applying Affordances 55
2.6 Literature Analysis of SNS Affordances 58
2.6.1 Social Affordances 58
2.6.2 Content Affordances 64
2.7 Chapter Conclusion 69
CHAPTER 3 METHODOLOGY 71
3.1 Introduction 71
3.2 Research Strategy 73
3.2.1 Research Philosophy 73
3.2.2 Ontological Level: Critical Realism 76
3.2.3 Epistemological Level: Post-Positivism 77
3.2.4 Methodological and Axiological Level: Case Study Research 82
3.2.5 Summary of Research Strategy 87
3.3 Study Design 89
3.3.1 Case Study Environments 91
3.3.2 Data Collection 108
3.3.3 Data Analysis 121
3.4 Chapter Conclusion 129
CHAPTER 4 FINDINGS PART 1: SYSTEM INVENTORY 130
4.1 Introduction 130
4.2 Social Affordance System Inventory 131
4.2.1 Profile Building Features 131
4.2.2 Social Connectivity Features 136
4.2.3 Social Interactivity Features 139
4.3 Content Affordance System Inventory 143
4.3.1 Content Discovery Features 143
4.3.2 Content Sharing Features 149
4.3.3 Content Aggregation Features 151
4.4 General SNS System Inventory 154
4.5 Chapter Conclusion 156
CHAPTER 5 FINDINGS PART 2: USER ACTIVITIES AND AFFORDANCES 157
5.1 Introduction 157
5.1.1 User Perspectives for Task Initiation 160
5.2 Active Seeking Findings 161
5.2.1 Active Seeking Process Model (RQ2) 162
5.2.2 Active Seeking Affordances (RQ3) 163
5.2.3 Active Seeking Activity-Affordance Relationship Model 179

5.3 Passive Encountering Findings 180
5.3.1 Passive Encountering Process Model (RQ2) 180
5.3.2 Passive Encountering Affordances (RQ3) 181
5.3.3 Passive Encountering Activity-Affordance Relationship Model 193
5.4 Content Sharing Findings 194
5.4.1 Content Sharing Process Model (RQ2) 194
5.4.2 Content Sharing Affordances (RQ3) 196
5.4.3 Content Sharing Activity-Affordance Relationship Model 205
5.5 Theoretical Research Model for the Consumption of Cultural Goods Using SNS 206
5.5.1 Constructs and Measures 207
5.5.2 Affordance Relationships 210
5.5.3 Activity-Affordance Relationships 216
5.6 Chapter Conclusion 220
CHAPTER 6 DISCUSSION 222
6.1 Introduction 222
6.2 Research Background 224
6.2.1 Research Objective 224
6.2.2 Study Design 226
6.3 Summary and Discussion of Research Findings 227
6.3.1 Research Question One: *what are the technical features of SNS?* 227
6.3.2 Research Question Two: *what activities do users undertake when consuming cultural goods in SNS?* 237
6.3.3 Research Question Three: *what are the affordances of SNS for the consumption of cultural goods?* 243
6.4 Study Contributions 261
6.5 Implications and Future Research 263
6.5.1 Implications for Research 263
6.5.2 Implications for Practice 265
6.5.3 Potential Limitations and Future Research Opportunities 266
BIBLIOGRAPHY 268
APPENDIX A METHODOLOGY 290
APPENDIX B PHASE ONE SYSTEM INVENTORY FINDINGS 294
APPENDIX C PHASE TWO INTERVIEW FINDINGS 301

LIST OF FIGURES

FIGURE 2-1: MUSIC CONSUMER ACTIVITY CYCLE (REGNER *ET AL.*, 2009, P. 337) 36
FIGURE 2-2: TWITTER SCREENSHOT OF "HOW DO I TWITTER?" (CAPTURED JULY 2014)..... 44
FIGURE 2-3: TWITTER SCREENSHOT OF HASHTAG INSTIGATION (CAPTURED JULY 2014)..... 45
FIGURE 2-4: BUZZFEED SCREENSHOT OF "DEFINING THE SUBTWEET" (CAPTURED JULY 2014) 45
FIGURE 2-5: TWITTER SCREENSHOT OF "WHAT IS TWITTER FOR?" (CAPTURED JULY 2014)..... 46
FIGURE 2-6: ARTIFACT-USER RELATIONSHIP ADAPTED FROM MARKUS AND SILVER (2008) 55
FIGURE 3-1: THE THREE DOMAINS OF REAL ADAPTED FROM MINGERS (2004A) 77
FIGURE 3-2: RESEARCH STRATEGY 88
FIGURE 3-3: STUDY DESIGN..... 90
FIGURE 3-4: PERCENTAGE OF SNS USER AGES..... 92
FIGURE 3-5: PERCENTAGE OF SNS USER GENDERS 92
FIGURE 3-6: PERCENTAGE OF SNS USER EDUCATION 93
FIGURE 3-7: PERCENTAGE OF SNS USER HOUSEHOLD INCOME 93
FIGURE 3-8: PLUGD RECORDS HOMEPAGE SCREENSHOT (CAPTURED AUTUMN 2013)..... 97
FIGURE 3-9: BJORK HOMEPAGE SCREENSHOT (CAPTURED AUTUMN 2013)..... 98
FIGURE 3-10: GUARDIAN MUSIC HOMEPAGE SCREENSHOT (CAPTURED AUTUMN 2013)..... 99
FIGURE 3-11: AMANDA PALMER HOMEPAGE SCREENSHOT (CAPTURED AUTUMN 2013) 100
FIGURE 3-12: COMPARISON OF RESPONDENT INTENSITY LEVELS..... 104
FIGURE 3-13: COMPARISON OF ACTIVE-PASSIVE USER TYPES..... 106
FIGURE 3-14: DISPLAY OF ACTIVE-PASSIVE USER TYPES IN CASE SITES 107
FIGURE 3-15: INTERVIEW SAMPLE EXCERPT: NVIVO CODING REPORT 127
FIGURE 5-1: ACTIVE SEEKING PROCESS MODEL..... 162
FIGURE 5-2: AFFORDANCE MODEL A – CONNECTION SEARCH AND FOLLOW..... 172
FIGURE 5-3: AFFORDANCE MODEL B – CONNECTION SEARCH AND EXPLORE 176
FIGURE 5-4: AFFORDANCE MODEL C – SEARCHING FOR KEY TERMS 178
FIGURE 5-5. ACTIVE SEEKING ACTIVITY-AFFORDANCE RELATIONSHIP MODEL 179
FIGURE 5-6: PASSIVE ENCOUNTERING PROCESS MODEL..... 181
FIGURE 5-7: AFFORDANCE MODEL D – BROWSING ACTIVITY FEED AND DISCOVERING CONTENT ..190
FIGURE 5-8: AFFORDANCE MODEL E – DIRECTED CONNECTION INTERACTIONS 192
FIGURE 5-9. PASSIVE ENCOUNTERING: ACTIVITY-AFFORDANCE RELATIONSHIP MODEL..... 193
FIGURE 5-10: CONTENT SHARING PROCESS MODEL..... 195
FIGURE 5-11: AFFORDANCE MODEL F – CREATING AND SHARING CONTENT 203
FIGURE 5-12: AFFORDANCE MODEL G – PROPAGATING INTERNAL CONTENT..... 204
FIGURE 5-13. CONTENT SHARING: ACTIVITY-AFFORDANCE RELATIONSHIP MODEL 205
FIGURE 5-14: THEORETICAL RESEARCH MODEL FOR THE CONSUMPTION OF CULTURAL GOODS USING SNS 209
FIGURE 5-15: AFFORDANCE RELATIONSHIP MODEL 210
FIGURE 5-16: ACTIVITY-AFFORDANCE RELATIONSHIP MODEL 216
FIGURE 6-1: ACTIVE SEEKING PROCESS MODEL..... 239
FIGURE 6-2 PASSIVE ENCOUNTERING PROCESS MODEL..... 240
FIGURE 6-3: CONTENT SHARING PROCESS MODEL..... 241
FIGURE 6-4: AFFORDANCE MODEL A – CONNECTION SEARCH AND FOLLOW..... 244
FIGURE 6-5: AFFORDANCE MODEL B – CONNECTION SEARCH AND EXPLORE 245

FIGURE 6-6: AFFORDANCE MODEL C – SEARCHING KEY TERMS 245
FIGURE 6-7: AFFORDANCE MODEL D – BROWSING ACTIVITY FEED AND DISCOVERING CONTENT ..246
FIGURE 6-8: AFFORDANCE MODEL E – DIRECTED CONNECTION INTERACTIONS 246
FIGURE 6-9: AFFORDANCE MODEL F – CREATING AND SHARING CONTENT 247
FIGURE 6-10: AFFORDANCE MODEL G – PROPAGATING INTERNAL CONTENT 247
FIGURE 6-11: THEORETICAL RESEARCH MODEL FOR THE CONSUMPTION OF CULTURAL GOODS USING SNS 249

LIST OF TABLES

TABLE 1-1: RESEARCH QUESTIONS AND STUDY OUTCOMES 4
TABLE 1-2: STAGES OF THE RESEARCH PROCESS 6
TABLE 1-3: STAGE ONE OF THE RESEARCH PROCESS 7
TABLE 1-4: STAGE TWO OF THE RESEARCH PROCESS 7
TABLE 1-5: STAGE THREE OF THE RESEARCH PROCESS 8
TABLE 1-6: STAGE FOUR OF THE RESEARCH PROCESS 9
TABLE 2-1: SOCIAL MEDIA TERMS DEFINED 23
TABLE 2-2: SOCIAL MEDIA CLASSIFICATION ADAPTED FROM KAPLAN AND HAENLEIN (2010) 25
TABLE 2-3: PRE-INTERNET ERA MUSIC SOURCES 32
TABLE 2-4: POST-INTERNET ERA MUSIC SOURCES 33
TABLE 2-5: MUSIC SEEKER CHARACTERISTICS (SOURCE: LEE AND DOWNIE, 2004) 35
TABLE 2-6: THEORETICAL LENS SUITABILITY 48
TABLE 2-7: IT ARTIFACT CONCEPTS (SOURCE: MARKUS AND SILVER, 2008) 53
TABLE 2-8: SYNCHRONOUS AND ASYNCHRONOUS INTERACTIVITY FEATURES 63
TABLE 3-1: RESEARCH QUESTIONS AND STUDY OUTCOMES 71
TABLE 3-2: BELIEFS OF ALTERNATIVE PARADIGMS AMENDED FROM GUBA AND LINCOLN (1994) 78
TABLE 3-3: SIX KEY IDEAS OF A POSITIVIST APPROACH (SOURCE: O'HEAR, 1989) 79
TABLE 3-4: APPROACH SUITABILITY FOR RESEARCH CONTEXT (SOURCE: HAIR *ET AL.,* 2007) 84
TABLE 3-5: COMPARISON OF QUALITATIVE METHODS (SOURCE: DUBÉ AND PARÉ, 2001) 86
TABLE 3-6: CASE STUDY TACTICS FOR FOUR DESIGN TESTS (SOURCE: YIN, 2003) 87
TABLE 3-7: STAGES OF THE RESEARCH PROCESS 89
TABLE 3-8: SOCIAL NETWORK SITE PAGE RANK AND GENERAL STATISTICS 92
TABLE 3-9: AVERAGE SNS USER DEMOGRAPHICS 93
TABLE 3-10: INTERVIEW CASE SITES AND CASE GROUPS 96
TABLE 3-11: INTERVIEW CASE STUDY SITE DETAILS 101
TABLE 3-12: COMPARISON OF MUSIC INTENSITY AND SNS INTENSITY 102
TABLE 3-13: COMPARISON OF USER TYPES ACROSS CASE SITES AND GROUPS 107
TABLE 3-14: INTERVIEW RESPONDENTS AND INTERVIEW DETAILS 111
TABLE 3-15: INTERVIEW RESPONDENT DEMOGRAPHICS 112
TABLE 3-16: INTERVIEW RESPONDENT MUSIC INTENSITY 114
TABLE 3-17: FACEBOOK INTERVIEW RESPONDENT PROFILE DETAILS AND SNS INTENSITY 117
TABLE 3-18: TWITTER INTERVIEW RESPONDENT PROFILE DETAILS AND SNS INTENSITY 119
TABLE 3-19: AVERAGES OF FACEBOOK COUNTS 120
TABLE 3-20: CONTENT ANALYSIS APPLICATION (SOURCE: KRIPPENDORFF, 2004) 121
TABLE 3-21: SYSTEM INVENTORY SAMPLE DATA TABLE 124
TABLE 3-22: SYSTEM INVENTORY SAMPLE TABLE: AFFORDANCE ANALYSIS 125
TABLE 3-23: SYSTEM INVENTORY SAMPLE TABLE: SNS FEATURE COMPARISON 125
TABLE 3-24: SYSTEM INVENTORY SAMPLE TABLE: KEY FEATURE ANALYSIS 126
TABLE 3-25: SYSTEM INVENTORY SAMPLE TABLE: TAGGING FEATURE COMPARISON 126
TABLE 3-26: INTERVIEW SAMPLE TABLE: INITIAL DATA CODING OF TRANSCRIPTS 127
TABLE 3-27: SAMPLE INTERVIEW DATA ANALYSIS TABLE 128
TABLE 3-28: INTERVIEW SAMPLE TABLE: CHAINS OF ANALYSIS 128
TABLE 4-1: RESEARCH QUESTIONS AND STUDY OUTCOMES 130

TABLE 4-2: SOCIAL AFFORDANCE SYSTEM INVENTORY 132
TABLE 4-3: PROFILE BUILDING SYSTEM INVENTORY 133
TABLE 4-4: SOCIAL CONNECTIVITY SYSTEM INVENTORY 136
TABLE 4-5: SOCIAL INTERACTIVITY SYSTEM INVENTORY 139
TABLE 4-6: CONTENT AFFORDANCE SYSTEM INVENTORY 144
TABLE 4-7: CONTENT DISCOVERY SYSTEM INVENTORY 145
TABLE 4-8: CONTENT SHARING SYSTEM INVENTORY 149
TABLE 4-9: CONTENT AGGREGATION SYSTEM INVENTORY 151
TABLE 4-10: GENERAL SNS SYSTEM INVENTORY 155
TABLE 5-1: RESEARCH QUESTIONS AND STUDY OUTCOMES 157
TABLE 5-2: ACTIVE SEEKING CONSTRAINTS – MENTION COUNTS 164
TABLE 5-3: AFFORDANCE A MENTION COUNTS 167
TABLE 5-4: AFFORDANCE B MENTION COUNTS 173
TABLE 5-5: AFFORDANCE C MENTION COUNTS 177
TABLE 5-6: AFFORDANCE D MENTION COUNTS 182
TABLE 5-7: AFFORDANCE E MENTION COUNTS 191
TABLE 5-8: CONTENT SHARING CONSTRAINTS MENTION COUNTS 197
TABLE 5-9: AFFORDANCE F MENTION COUNTS 199
TABLE 5-10: AFFORDANCE G MENTION COUNTS 203
TABLE 5-11: CONSTRUCTS AND EMPIRICAL INDICATORS 208
TABLE 5-12: AFFORDANCE RELATIONSHIP PROPOSITIONS AND EVIDENCE 212
TABLE 5-13 ACTIVITY-AFFORDANCE RELATIONSHIP PROPOSITIONS AND EVIDENCE 218
TABLE 6-1: RESEARCH QUESTIONS AND STUDY OUTCOMES 225
TABLE 6-2: STAGES OF THE RESEARCH PROCESS 226
TABLE 6-3: STAGE TWO OF THE RESEARCH PROCESS 227
TABLE 6-4: GENERAL SNS SYSTEM INVENTORY 229
TABLE 6-5: STAGE THREE OF THE RESEARCH PROCESS 237
TABLE 6-6: STAGE FOUR OF THE RESEARCH PROCESS 243
TABLE 6-7: AFFORDANCES CATEGORISED BASED ON ACTIVITY 244
TABLE 6-8: CONSTRUCTS AND EMPIRICAL INDICATORS 248
TABLE 6-9: SUMMARY OF RESEARCH CONTRIBUTIONS 262
APPENDIX:
TABLE A-2.1: INITIAL DATA CODING OF INTERVIEW TRANSCRIPTS 293
TABLE B-1.1: FACEBOOK FEATURE ANALYSIS 294
TABLE B-1.2: YOUTUBE FEATURE ANALYSIS 297
TABLE B-1.3: TWITTER FEATURE ANALYSIS 298
TABLE C-1.1: TWITTER ACTIVE SEEKING CONSTRAINTS 301
TABLE C-1.2: FACEBOOK ACTIVE SEEKING CONTRAINTS 301
TABLE C-2.1: CHAINS OF EVIDENCE FOR AFFORDANCE A 302
TABLE C-3.1: CHAINS OF EVIDENCE FOR AFFORDANCE B 305
TABLE C-4.1: CHAINS OF EVIDENCE FOR AFFORDANCE C 307
TABLE C-5.1: CHAINS OF EVIDENCE FOR AFFORDANCE D 308
TABLE C-6.1: CHAINS OF EVIDENCE FOR AFFORDANCE E 317
TABLE C-7.1: CONTENT SHARING CONNOTATIONS 319
TABLE C-8.1: CHAINS OF EVIDENCE FOR AFFORDANCE F 320
TABLE C-9.1: CHAINS OF EVIDENCE FOR AFFORDANCE G 327

TABLE C-10.1: AFFORDANCE PREVALENCE ACROSS ALL RESPONDENTS 328
TABLE C-10.2: AFFORDANCE PREVALENCE ACROSS CASE SITES 329
TABLE C-10.3: AFFORDANCE PREVALENCE ACROSS CASE GROUPS 330
TABLE C-10.4: USER TYPES WITHIN EACH CASE 331
TABLE C-10.5: OVERVIEW OF AFFORDANCE PREVALENCE 332
TABLE C-11.1: ACTIVITY PREVALENCE WITHIN EACH USER CLASSIFICATION 333
TABLE C-12.1: ANALYSIS OF AFFORDANCE PREVALENCE ACROSS CASE SITES AND CASE GROUPS ... 334
TABLE C-13.1: ANALYSIS OF AFFORDANCE PREVALENCE ACROSS USER TYPES 335

The Author declares that, except where duly acknowledged, this thesis is entirely her own work and has not been submitted for any degree in the National University of Ireland, or any other University.

ABSTRACT

This thesis presents research theorising the use of social network sites (SNS) for the consumption of cultural goods. SNS are Internet-based applications that enable people to connect, interact, discover, and share user-generated content. They have transformed communication practices and are facilitating users to present their identity online through the disclosure of information on a profile. SNS are especially effective for propagating content far and wide within a network of connections. Cultural goods constitute hedonic experiential goods with cultural, artistic, and entertainment value, such as music, books, films, and fashion. Their consumption is culturally dependant and they have unique characteristics that distinguish them from utilitarian products. The way in which users express their identity on SNS is through the sharing of cultural interests and tastes. This makes cultural good consumption vulnerable to the exchange of content and ideas that occurs across an expansive network of connections within these social systems.

However, there has been very little research on the use of social network sites for the consumption of cultural goods, and a lack of theory for understanding complex interactive social systems. Therefore, this study proposes the lens of affordances to theorise the use of social network sites for the consumption of cultural goods. Qualitative case study research using two phases of data collection is proposed in the application of affordances to the research topic. The interaction between task, technology, and user characteristics is investigated by examining each characteristic in detail, before investigating the actual interaction between the user and the artifact for a particular purpose.

Phase one of the study involved a system inventory of three social network sites: Facebook, YouTube, and Twitter. The user guides and help of documentation of the three sites were analysed using the social and content affordances of SNS identified in the literature review. This phase identified the intended affordances of SNS and resulted in a list of 18 technical features, their functionality, and a collection of corresponding instantiations. A system inventory is presented for each SNS affordance across the three case sites. This analysis is abstracted and applied to general SNS systems, providing empirical measures and constructs for the second phase of data collection.

Phase two of the study involved interviews with 24 SNS users from Facebook and Twitter. This phase gathered data on actual affordances of SNS for the consumption of cultural goods. The interview findings revealed three types of behaviours that users engaged in: (1) active seeking, (2) passive encountering, and (3) content sharing. For active seeking, users engaged in directed searching and exploring behaviours, with specific content in mind. Conversely, users passively encountered content within the social network without specifically seeking it via activity feeds and social interactions. In addition, users engaged in content sharing behaviours both before and after discoveries were made, whether as a result of active seeking or passively encountering content in the network. From these consumption behaviours seven affordances and associated affordance models were identified. These models represent the interplay between the technical artifact and user activities. The affordance models were amalgamated into a theoretical research model for the consumption of cultural goods using SNS. The theoretical research model identified the dependencies between the affordances and between the affordances and user activities. As a result, 14 propositions are set forth theorising the relationships and hierarchical nature of SNS affordances and user activities.

The study contributes to knowledge by (i) improving our understanding of the affordances of social network sites for the consumption of cultural goods, (ii) demonstrating the role of task, technology and user characteristics in mediating user behaviour for user-artifact interactions, (iii) explaining the technical features and user activities important to the process of consuming cultural goods using social network sites, and (iv) theorising the consumption of cultural goods using SNS by presenting a theoretical research model which identifies empirical indicators of model constructs and maps out their dependencies and hierarchies. This study contributes to the study of social network sites and music consumption with implications for SNS researchers, cultural goods and music researchers, and researchers using affordances as a lens. Furthermore, the study has implications for SNS and social media providers as well as music producers and the cultural good industries in general. The study also provides a systematic research process for applying the concept of affordances to the study of system use.

In the words of the philosopher Sceptum,
the founder of my profession:
am I going to get paid for this?
– Terry Pratchett, Night Watch

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And at last, to my family,
without you I would be nothing,
so thank you for everything.

CHAPTER 1
INTRODUCTION

1.1 Introduction to Study

This chapter begins by outlining the rationale for the study (Section 1.2). The study argues that cultural good consumption is inherently linked to social media technologies like social network sites (SNS), and that SNS are extremely effective for cultural and identity expression. In addition, SNS are implicated in the widespread electronic word-of-mouth exchanges that have proven to be so influential in the cultural sector. Thus, the following section (1.3) presents the study's research objective and proposes affordances as a relevant theoretical lens for the study of the use of social network sites for the consumption of cultural goods. Based on the research objective and lens of affordances, three research questions are presented. The next section (1.4) provides a summary of the key research contributions and concludes by outlining the design of the study for the treatment of affordances, implemented in four stages with two phases of data collection (Section 1.5).

1.2 Rationale for Study

Social network sites provide users with rich interactive cultural experiences within a bounded group of connections, through the ability to create and maintain a personal profile (Kaplan and Haenlein, 2010; Russo and Peacock, 2009; Ahn *et al.*, 2007; boyd and Ellison, 2007; Liu, 2007). Correspondingly, cultural goods are used as a form of taste expression and SNS provide users with a platform with which to disclose these tastes (Hartline *et al.*, 2008; Livingstone, 2008; Potts *et al.*, 2008; Liu, 2007; Throsby, 2003). Cultural goods can be described as hedonic experiential products and services with intrinsic and social value (Molteni and Ordanini 2003; Flew, 2002; Cunningham, 2002; Caves, 2000). Examples of cultural goods include music, film, TV, design, games, software, books, *etc.* (Smith and Telang 2009; Solidoro, 2009; Potts *et al.*, 2008; Caves, 2000).

While the impact of the Internet and digital technologies on consumer consumption behaviour has been researched to date (*cf.* Gosain and Lee, 2001; Molteni and Ordanini, 2003; Pantzar, 2000; Rupp and Estier, 2003; Singh *et al.*, 2006; Williams *et al.*, 2008), the use of SNS for the consumption of cultural goods has yet to be examined. Unlike other Internet technologies, SNS promote social connections and

interactions as a way of accessing and sharing content with others. These systems create an environment for effective and viral electronic word-of-mouth exchanges, so vital in the consumption of cultural goods (Miller and Lammas, 2010; Jansen *et al.*, 2009; Duan *et al.*, 2008; Allsop *et al.*, 2007). This is because of the influence of a consumer's social network in forming and assessing cultural tastes, as well as influencing purchasing decisions (Kaplan and Haenlein, 2011; Setterstrom and Pearson, 2010; Nielson, 2009; Potts *et al.*, 2008; Brown *et al.*, 2007; Hennig-Thurau *et al.*, 2004; Molteni and Ordanini, 2003; Caves, 2000). Electronic word-of-mouth involves the voluntary communication of positive or negative opinions about a product or a company accessible to a multitude of people online (Hennig-Thurau *et al.*, 2004). Social network site platforms, which consist of friends, family, distant connections, interest connections, musicians, companies, *etc.*, create a milieu of cultural interests that profoundly affect changes in individual values, attitudes, and behaviours (Kaplan and Haenlein, 2011; Setterstrom and Pearson, 2010; Hartline *et al.*, 2008; Brown *et al.*, 2007; Liu, 2007).

The Internet and digital technologies have impacted music as a cultural good specifically, by altering the music industry business model and its control over the flow of music to consumers, facilitating new music production and consumption practices (*cf.* Wikstrom, 2010; Cha *et al.*, 2009; Regner *et al.*, 2009; Beer, 2008; Duan *et al.*, 2008; Riegner, 2007; Molteni and Ordanini, 2003; Rupp and Estier 2003; Healy, 2002; Gosain and Lee 2001; Lam and Tan, 2001; Leyshon 2001; Dolfsma, 2000). Music discussions now takes place online, enhancing the richness of music conversations with the ability to post links to audio content, videos or other music information. Additionally, communication practices have moved to SNS, and music discussion is an important element in creating and maintaining friendship networks (Singh *et al.*, 2006). SNS provide the ability to view other people's musical tastes, follow artists/bands within the network, sample and discover new and old music, and share tastes amongst friends and strangers. These technologies have provided an opportunity to enhance or replace traditional forms of music consumption practices.

SNS are complex interactive social systems that require theories of knowledge that take into consideration their experiential hedonic nature, as well as the differing user characteristics and motivations – that exist because of large and diverse user bases

(Hargittai, 2007). Cultural goods share the experiential and hedonic characteristics of SNS and intrinsic motivations are relevant for both cultural good consumption and SNS use. Unfortunately, there is a paucity of research on SNS usage. One of the reasons for this scarcity of work is a lack of empirical data (Hargittai, 2007). Furthermore, knowledge on user activity in SNS is relatively broad, making it difficult to understand SNS use in a variety of contexts (Hargittai, 2007). This complimentary relationship of social network sites and the consumption of cultural goods has yet to be studied. Thus, the following section presents the research objective and research questions.

1.3 Research Objective and Research Questions

The way that individuals use social network sites for the consumption of cultural goods has not been studied in the literature, and given the nature of these goods and the capabilities of SNS, there is a clear alignment in the possibilities for user action. However, there is a lack of research on both hedonic information system use and hedonic consumer behaviour, leaving gaps in our theoretical knowledge for understanding both system use and user action in this context. Hence, the research objective is to:

> *theorise the relationship between the consumption of cultural goods and user activity on social network sites through the lens of affordances.*

Given this research objective, affordances are proposed as the theoretical lens for this study. Affordances are the possibilities for goal-oriented action afforded to a specific user group by a technical artifact (Markus and Silver, 2008). They describe the characteristics of an interactive system, which suggests how the system should be used. Affordances are defined in this study as the perceptions of a user regarding the capability of a technical artifact for undertaking a task, and therefore the relationship between task, technology, and user characteristics in mediating user action. By applying the concept of affordances we can study these relational concepts to understand complex interactive systems.

In order to operationalise the research objective and driven by the theoretical lens of affordances, the following research questions are proposed:

1. *What are the technical features of SNS?*
2. *What activities do users undertake when consuming cultural goods in SNS?*
3. *What are the affordances of SNS for the consumption of cultural goods?*

Case study research using two phases of data collection was proposed to investigate the use of social network sites for the consumption of cultural goods. To address research question one: *what are the technical features of SNS?* a system inventory examining the user guides and help documentation of three social network sites was undertaken. To address research question two and three: w*hat activities do users undertake when consuming cultural goods in SNS?* and *what are the affordances of SNS for the consumption of cultural goods?* interviews were conducted with 24 respondents from two social network sites who were also a part of a music-oriented group within each site. The research questions, and the methods in which to address them, are summarised in Table 1-1, along with the outcomes for each phase of data collection.

RESEARCH QUESTIONS		METHOD	OUTCOME
1	*What are the technical features of SNS?*	**Phase 1:** System Inventory	– System inventory of 18 technical features aligned with the generic SNS affordances
2	*What activities do users undertake when consuming cultural goods in SNS?*	**Phase 2:** Interviews	– Four active/passive user types – Three user activity process models
3	*What are the affordances of SNS for the consumption of cultural goods?*		– Seven affordances for the consumption of cultural goods using SNS – Theoretical research model with 14 propositions of affordance and activity relationships and dependencies

Table 1-1: Research Questions and Study Outcomes

Each method is described in more detail in Section 1.5, where the design of the study is outlined, illustrating the application of affordances for addressing the research objective.

1.4 Key Contributions

Although there is an agreed upon definition of SNS, a comprehensive list of features and their affordances does not exist. Therefore, this research contributes empirical constructs to the study of social network sites and to consumer behaviour research. Firstly, 18 technical features of general SNS, their functionalities and specific instantiations are provided. In addition, these features are categorised into social and content affordances with a description of the structure and hierarchy of system functionality. Likewise, measures for investigating SNS usage intensity and music consumption intensity are provided, which facilitates the classification of users into active and passive user types and provides a rich view of SNS users and music consumers.

Three activity process models are presented outlining the process of consuming music from three perspectives: active seeking, passive encountering, and content sharing. These models reconceptualise user activity relevant to theories of consumer behaviour and the study of SNS use, by providing a representation of user and task interaction. Moreover, this research contributes seven affordances for the consumption of music using social network sites. Corresponding affordance models represent the activity-artifact interaction and provide a rich understanding of the use of SNS for consuming music. Finally, this research contributes to theory by providing a systemic research process that describes the application of affordances to complex interactive social systems.

1.5 Study Design

The case study design consists of two phases of data collection, the first, a system inventory of three general SNS, and the second, 24 interviews with a specific set of SNS music consumers. These methods enabled the researcher to add value at each stage of the research process as displayed in Table 1-2.

There are four stages in the research process. The early stages vary in the specificity of technology, user, and task. This staged process helps to facilitate the treatment of affordances – from the first examination of a technical artifact, and its technical features and functionalities, to analysing the actual interactions of a set of users based on the affordances perceived. A low level of specificity in the table signifies a generic technology, user, or task. In contrast, a high level of specificity signifies an

identified technology, user, or task. For example, in stage two the system inventory examined three specific social network sites: Facebook, YouTube, and Twitter. However, no specific user or task was identified in this stage – just general SNS users and general use of SNS systems.

RESEARCH PROCESS					
Stage	**Source**	**Degree of Specificity**			**Outcome**
		Tech	**User**	**Task**	
1	**Literature Review** --Chapter 2--	**Low**	**Low**	**Low**	– Six generic SNS affordances – Six music consumption tasks
2	**System Inventory** **--**Chapter 4--	**High**	**Low**	**Low**	– 18 technical SNS features, functionalities & instantiations
3	**Interviews** --Chapter 5--	**Low**	**High**	**High**	– Four classifications of users – Three activity process models
4	**Interviews** --Chapter 5--	**High**	**High**	**High**	– Seven SNS affordances for the consumption of music

Table 1-2: Stages of the Research Process

Each stage adds a new layer of understanding. The deepest exploration, with the richest insight, is in the combination of all three elements to the highest degree of specificity (*i.e.* stage four); where a specific technology, specific user, and a specific set of tasks is under examination. This is contrast with stage one, which provides limited insight and is based on gathering knowledge from previous research to understand the accepted affordances of a system.

1.5.1 Research Process Stage One

The first stage begins with the literature review (Chapter 2). This stage involves gathering information on the research problem from previous research and the resulting contributions to knowledge. What is known about the affordances of social network sites is based on our current understanding of what social network sites were created for and how people have used them. It is here that the lowest level of insight is gained due to the low level of specificity available for the affordances of SNS for the consumption of cultural goods (see Table 1-3). However, it did provide a strong foundation for proceeding stages. There is no specific technology, user, or task examined, but an amalgamation based on extant literature and previous studies of social network sites.

RESEARCH PROCESS STAGE ONE				
Stage	**Source**	**Tech.**	**User**	**Task**
1	**Literature** --Chapter 2--	**Low**	**Low**	**Low**
		Generic SNS Technologies	Generic SNS Users	Generic SNS Use

Table 1-3: Stage One of the Research Process

This stage resulted in six generic SNS affordances divided into two categories: social and content affordances. In this application, we have yet to directly perceive the relationship between an artifact and a user. Our understanding is based on previous studies of SNS platforms and general SNS users. Thus, we categorise these affordances as 'generic' SNS affordances. This stage also resulted in six music consumption tasks divided into three types of activities: information seeking, information encountering, and information sharing. Additionally, a broad representation of general SNS users and music consumers is presented. This understanding of SNS and music consumption is applied to the following stages in the research process and is used to guide data collection and analysis.

1.5.2 Research Process Stage Two

The second stage of the research process consisted of phase one of data collection (*i.e.* the system inventory) and addresses research question one: *what are the technical features of SNS?* The system inventory data collection and analysis methods are outlined in Chapter 3 (Section 3.3.2.1 and 3.3.3.1). To summarise, the system inventory detailed the technology, identifying the technical features from the user help guides from three social network sites: Facebook, Twitter, and YouTube. No specific user or task was specified at this stage, thus these are categorised as 'low' in Table 1-4.

RESEARCH PROCESS STAGE TWO				
Stage	**Source**	**Tech.**	**User**	**Task**
2	**System Inventory** --Chapter 4--	**High**	**Low**	**Low**
		Facebook, Twitter, & YouTube	Generic SNS Users	Generic SNS Use

Table 1-4: Stage Two of the Research Process

Stage two accounts for the designer's perspective. Designers create a technical artifact with specific functionality in mind. To understand the purpose of the system, the designers create user guides and help documentation to inform a user's

interaction with the artifact. By examining this documentation, an extensive inventory of system features was catalogued. This analysis resulted in 18 technical features[1], their functionalities and specific instantiations. In addition, it updated our understanding of the social and content affordances and their relation to each other. The system inventory findings are presented in Chapter 4.

1.5.3 Research Process Stage Three

Stage three of the research process examines the activities of a specific group of users distinct from the interactions with the technology (see Table 1-5). Hence, the specificity of user and task is high and the technology is low. This stage addresses research question two: *what activities do users undertake when consuming cultural goods in SNS?* Data was collected and analysed as a part of phase two of the research methodology (described in Chapter 3 Section 3.3.2.2 and 3.3.3.2). Phase two consisted of 24 interviews with SNS music consumers. The outcome of this stage is an extensive overview of users and music consumption activities.

RESEARCH PROCESS STAGE THREE				
Stage	**Source**	**Tech.**	**User**	**Task**
3	**Interviews** --Chapter 5--	**Low**	**High**	**High**
		Generic SNS Technologies	SNS Users and Music Consumers	Music Consumption Activities

Table 1-5: Stage Three of the Research Process

User classifications were created based on music consumption intensity and SNS usage intensity. This resulted in the classification of four active/passive user types. Additionally, three process models, representing user activities were developed including: (1) active seeking (2) passive encountering, and (3) content sharing. Active seeking involves purposeful goal-directed tasks and passive encountering is based on discoveries made when not specifically seeking content. Content sharing is represented as a possible outcome of both processes of active seeking and passive encountering, as well as a user-instigated act. The findings from the interviews are presented in Chapter 5.

[1] Twenty features were originally defined but this was refined after phase two of data collection and analysis.

1.5.4 Research Process Stage Four

The fourth and final stage of the research process fully applies the concept of affordances by taking into account the technical artifact, a specific user group and the activities they engaged in (see Table 1-6). Thus, addressing research question three: *what are the affordances of SNS for the consumption of cultural goods?* Data was collected as a part of phase two of the research methodology as described in the previous section (Stage Three). Two SNS case sites were selected: Twitter and Facebook. Users were sampled based on their involvement in a music group within both SNS.

Data on actual interactions was gathered which resulted in the identification of seven affordances for the consumption of cultural goods using SNS. These affordances are based on actual interactions with a system, for a particular purpose by a specific user, providing a rich view of activity-artifact interactions. The findings for this stage are presented in Chapter 5.

RESEARCH PROCESS STAGE FOUR				
Stage	**Source**	**Tech.**	**User**	**Task**
4	**Interviews** --Chapter 5--	**High**	**High**	**High**
		Facebook and Twitter	SNS Users and Music Consumers	Music Consumption Activities

Table 1-6: Stage Four of the Research Process

Following the results from the final stage of the research process, Chapter 6 presents the conclusions of the study. It begins by providing an overview of the research study's background and summarising the main findings for each of the three research questions. The chapter then presents the main contributions to research before identifying the study's potential limitations and future opportunities.

Thesis Structure Summary

The thesis is structured in the following order. Firstly, **Chapter 2** presents an analysis of background literature on social media and cultural goods. The research strategy and study design are outlined in **Chapter 3**. This is followed by the system inventory (phase one) findings in **Chapter 4** and the interview (phase two) findings in **Chapter 5**. **Chapter 6** draws on prior chapters to discuss the findings and present the research contributions.

1.6 Peer-reviewed Publications

O'Riordan, Sheila; Feller, Joseph; and Nagle, Tadhg, (2012). Exploring the Affordances of Social Network Sites: An Analysis of Three Networks. *ECIS 2012 Proceedings.* Paper 177. http://aisel.aisnet.org/ecis2012/177

O'Riordan, Sheila; Feller, Joseph; and Nagle, Tadhg, (2011). The Impact of Social Network Sites on the Consumption of Cultural Goods. *ECIS 2011 Proceedings.* Paper 203. http://aisel.aisnet.org/ecis2011/203

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

The web has had a profound impact on people and the way they conduct their daily lives. Just as the emergence of electronic commerce changed the way people shopped (Haubl and Trifts, 2000), social media is enabling new and often unanticipated activities (Russo and Peacock, 2009). In particular, social media and social network sites (SNS) have created an environment of co-creation and rich interactive cultural experiences, which affect the consumption of cultural goods (Russo and Peacock, 2009). Social network sites provide an online space for the creation of personal information profiles that facilitate users to interact with each other and exchange user-generated content (UGC) (Kaplan and Haenlein, 2010; Ahn *et al.*, 2007; boyd and Ellison, 2007). The creative industries and cultural goods phenomena encompass such fields as design, video games, fashion, music, TV, software, *etc.* (Smith and Telang 2009; Solidoro, 2009; Potts *et al.*, 2008). The consumption of these goods is heavily influenced by culture and one's social circle – and thus influenced by the move online, where word-of-mouth activities are occurring on a global scale, tied to a person's online persona (Kaplan and Haenlein, 2011; Liu, 2007).

Throughout the preceding decade, cultural goods have experienced profound technological change (Potts, 2006). This diffusion of technology has had a direct impact on the production, distribution, and consumption of cultural goods (Hoegg *et al.*, 2006; Molteni and Ordanini, 2003; Healy, 2002). For instance, it is now possible to search, download, and share digital cultural goods over the Internet (Molteni and Ordanini, 2003). Moreover, the consumption of cultural goods over the web is a form of social interaction and enjoyment (Throsby, 2003). When a cultural good "such as a painting or a novel is made available to the public, consumers absorb, interpret and evaluate the ideas contained in the work, discussing and exchanging their assessments with others" (Throsby, 2003, p. 21). Hence, cultural goods can be characterised by their hedonic and experiential qualities, which differentiate them from goods consumed for utility. Facilitated by social media, online interaction and networking has become a form of self-expression (Livingstone, 2008; Liu, 2007).

People convey their identity, lifestyle, and social relations by disclosing tastes in a social network (Livingstone, 2008; Liu, 2007). These technologies give consumers greater control in the commercial market by facilitating participation and enhancing influence over product and brand consumption (Duan *et al.*, 2008; Riegner, 2007). Additionally, consumers rely heavily on the opinions of their social network to make purchasing decisions, where word-of-mouth plays an important role in this behaviour (Brown *et al.*, 2007; Hennig-Thurau *et al.*, 2004). Social media extend consumer options for gathering 'unbiased' product information from other consumers and facilitate the user to offer their own opinions and recommendations in return (Hennig-Thurau *et al.*, 2004).

Music, in particular, has been one of the most popular cultural goods exchanged over the Internet (Healy, 2002). The consumption of music is viewed as a leisure activity whereby music and music discussion are seen as important elements in creating and maintaining friendship networks (Singh *et al.*, 2006). Music consumption is occurring in different technological contexts, where music can be accessed, shared and collected online (Singh *et al.*, 2006). Advances in technology and the change in consumer behaviour have heavily affected the music industry and other creative industries. However, social media applications and the impact they are having on society is not completely understood yet. As a result, it is a flourishing area of research with much still to discover, creating a rich source of opportunities for high impact research. The importance these technologies pose on how people interact, communicate, and consume has grown with the surge in the number of users, the time people spend on them, and the changing way they can be used.

To understand the use of SNS for the consumption of cultural goods it is first necessary to understand the capabilities of the technology in the context of a specific user group. Social network sites afford particular behaviours to users, whether intended or not. Designers create systems based on a set of requirements to facilitate particular functions. However, unintended functionality often arises after user engagement (Norman, 1988). The concept of affordances addresses the perceptions of a set of users in the context of a particular system. Affordances result "from the mental interpretation of things, based on our past knowledge and experience applied to our perception of the things about us" (Norman, 1988, p. 219). An affordance enables a user to undertake tasks in their environment (McLoughlin and Lee, 2007)

by shaping and constraining their understanding of what a system can achieve (Zammuto *et al.*, 2007). As a result, the theory of affordances is applied to the study of SNS, to both understand how these technologies evolve through user engagement and how they align with user goals and activities.

This chapter begins by discussing the complimentary relationship of social media and cultural goods (Section 2.2). Firstly cultural goods are defined (Section 2.2.1), outlining their unique characteristics. This is followed by a discussion on the integral role social media now plays in the consumption of cultural goods (Section 2.2.2). As a result, music as an exemplar cultural good is justified in the context of this study and aligned with social media use (Section 2.2.3). It became necessary therefore to examine social media and existing social media applications in more detail (Section 2.3). This is done by firstly defining social media and relevant social media terms (Section 2.3.1), before discussing social media classifications and identifying six types of social media applications in the literature (Section 2.3.2). In addition, the term 'social network sites' is redefined (Section 2.3.3). Background literature on music consumption is presented in Section 2.4, by describing the progression of music consumption pre and post Internet and adding new sources of music content for music consumers (Section 2.4.1). Consequently, this leads to a brief discussion on the characteristics of music seekers (Section 2.4.2). This section concludes by outlining the music consumer activity cycle and identifying six tasks associated with music consumption (Section 2.4.3). These tasks are divided into three types of consumption activities: information seeking, information encountering, and information sharing.

The next section presents the theoretical lens of the study (Section 2.5). The lens of affordances is justified based on the complexity in understanding social media use. The complexity of social media use is illustrated using Twitter as an example of the emergent socially constructed use of these platforms (Section 2.5.1). This leads to a comparison of competing theories of IS use and assessing the suitability of the theory of affordances in the context of the research topic (Section 2.5.2). Hence, affordances are defined through an evaluation of contrasting viewpoints within the affordance literature (Section 2.5.3). Furthermore, the practical application of affordances is described to guide research design (Section 2.5.4).

Having justified and defined affordances, the literature is analysed to identify social network site affordances for the consumption of cultural goods. However, no such research has been undertaken in this context and thus the social network site literature is analysed in the context of generic SNS users and generic SNS technologies (Section 2.6). The literature is synthesised and classified and six generic SNS affordances are described. These affordances are categorised as social and content affordances. Social affordances include profile building, social connectivity, and social interactivity (Section 2.6.1). Content affordances include content discovery, content sharing, and content aggregation (Section 2.6.2). The chapter concludes by summarising the arguments in the literature review and presenting the next steps in the study.

2.2 The (Complimentary) Relationship of Social Media and Cultural Goods

The consumption of cultural goods is considered experiential and culturally dependant. Searching for and acquiring cultural goods is a hedonic activity, more concerned with enjoyment than necessity (Hirschman and Holbrook, 1982). Likewise, social media's purpose is to provide users with social and entertaining experiences, characteristics associated with hedonic information systems. Hedonic information systems are described as systems that "aim to provide self-fulfilling rather than instrumental value to the user, are strongly connected to the home and leisure activities, focus on the fun aspect of using information systems, and encourage prolonged rather productive use" (Van der Heijden, 2004, p. 695). Cultural goods include products such as books, music, and films; which can be easily and cheaply digitalised (Smith and Telang, 2009; Gosain and Lee, 2001). Cultural goods are a part of the creative industries and have distinct characteristics that align them with the use of social media and other web technologies.

Social media support a variety of consumption activities, whether searching for products and information, or seeking entertainment like watching videos, playing games, or listening to music (Lumpkin and Dess, 2004; Healy, 2002). Moreover, social media and social network sites in particular, compliment cultural good consumption because these technologies enable users to express their identity, by disclosing tastes and revealing likes and dislikes within a network of connections; consequently influencing other consumers. For example, after creating a profile in a

social network site, users often disclose their interests including music, books, films or other cultural interests by tying this information to their profile or disclosing it in the posts they share with other users (Kaplan and Haenlein, 2010; boyd and Ellison, 2007). Cultural goods are used as a means of conveying a person's lifestyle and image, while social network sites are a mechanism by which this image is published online (Liu, 2007). Additionally, SNS users are often deeply personally invested in the technology, blurring the lines between virtual and actual communications, relationships, and identities (Lewis *et al.*, 2008).

SNS enable users to engage in electronic work of mouth behaviours, spreading product information, opinions, and recommendations across an expansive network of users (Kaplan and Haenlein, 2011; Miller and Lammas, 2010; Jansen *et al.*, 2009; Trusov *et al.*, 2009; Allsop *et al.*, 2007; Liu, 2006). Moreover, people who share similar interests and passions come together on SNS to converse with like-minded individuals (Hennig-Thurau *et al.*, 2004). Social influence is particularly relevant for these behaviours, as recommendations from known or unknown connections play a crucial role in the cultural sector and have been shown to substantially influence consumer attitudes and behaviours (Kaplan and Haenlein, 2011; Duan *et al.*, 2008; Chevalier and Mayzlin, 2006; Liu, 2006). Thus, by providing users with the information to form judgements based on personality, through SNS profile information, consumers do not just rely on friends and family for trusted product information but can also make judgements based on unknown sources.

The following sections describe the creative industries and the unique characteristics of cultural goods and cultural good consumption. Social media is identified as an integral aspect in the consumption of these goods, and music as a cultural good is briefly described before investigating social media technologies further.

2.2.1 What Constitutes a Cultural Good?

Naturally, the Internet has impacted the production and consumption of cultural goods (Nie and Erbring, 2000), but it is the pressure digital technologies have put on cultural goods and the established way of doing things that is most notable (Healy, 2002). The use of social media has resulted in a new era of social interaction, influencing consumer behaviour and consumption patterns by enabling people to discuss and share cultural goods in an open extensive network (Parameswaran and Whinston, 2007a). Cultural goods are a part of the creative industries, which comprise "activities which have their origin in individual creativity, skill and talent and which have the potential for wealth and job creation through generation and exploitation of intellectual property" (DCMS, 2001, p. 5). These industries are associated with goods and services with cultural, artistic, and entertainment value, such as: book and magazine publishing, the visual arts (painting and sculpture), the performing arts (theatre, opera, concerts, dance), sound recordings, cinema and TV films, fashion, and toys and games (Caves, 2000).

Cultural goods have unique characteristics that differentiate them from utilitarian goods (Cunningham, 2002; Flew, 2002; Caves, 2000). They are often referred to as 'experience goods' and thus create demand uncertainty, where buyers lack information prior to consumption, and where the satisfaction derived is largely subjective and intangible. (Cunningham, 2002; Flew, 2002; Caves, 2000). Creative workers derive non-economic forms of satisfaction from their work and creative activity (Flew, 2002; Caves, 2000). Consequently, creative workers care about their product and so too do consumers, creating a relationship between the good, the creator, and the consumer. Cultural goods are differentiated products with an almost infinite variety of creative products available, which often produce durable products and durable rents, where their producers continue to extract economic rents long after the period of production (Flew, 2002; Caves, 2000).

What distinguishes them from utilitarian goods specifically, and displays their consumption suitability using social network site platforms, are the following attributes (Molteni and Ordanini 2003, p. 390-391):

(1) *experiential in nature:* quality is uncertain and may not be learned or measured even after consumption;
(2) *subjectively meaningful:* there is no standard reference to compare tastes;
(3) *culture dependant:* consumption of these goods expresses who people are and the social groups they belong to; and
(4) *subject to individual preferences and taste:* people consume cultural goods according to taste but also as a part of a wider social and cultural matrix.

When demand and quality of cultural goods is uncertain, other dimensions play a role in consumer behaviour (Throsby, 2003; Flew, 2002). Such as 'social contagion' where people prefer what other people prefer and individual tastes are subject to continuous interactions with others (Molteni and Ordanini, 2003). In addition, these tastes emerge from social contexts and are developed and refined over time (Caves, 2000). This is where social network sites affect consumption – a user's preferences are shared, as a part of their profile or activity on social network sites, thus enabling social contagion on a large scale. Cultural good consumption also results in 'demand reversal'; once too many people participate in a particular fashion, it ceases to be attractive and the trend reverses (Molteni and Ordanini, 2003). SNS may instigate overexposure of a cultural good. Because of the expansive ubiquitous nature of SNS, product information may reach a far wider audience. This could result in either positive or negative connotations for a cultural good, instigating social contagion or demand reversal. "Although nobody knows its fate when a new creative good appears, social contracts transmit consumers' appraisals at a very low perceived cost to them, giving 'word of mouth' its importance of a creative good's ultimate success" (Caves, 2000, p. 173). Thus, the following section argues that social media has become an integral aspect of cultural good consumption – because of the nature of the goods themselves, as highlighted in this section, and because of the nature of social media and what they enable users to do.

2.2.2 Social Media an Integral Aspect of Cultural Good Consumption

The evolution of the web and the growing use of social media affect cultural goods in significant ways. From a macro perspective, the creative industries have evolved with the 'new knowledge economy' (Solidoro, 2009) and developed in conjunction with economic growth (Potts *et al.*, 2008). From a micro perspective, individuals no longer require significant resources to publish information, as social media provides accessible and inexpensive methods that enable anybody to create, share, and access information (Ahlqvist *et al.*, 2010). More than ever before, "using media means creating as well as receiving, with user control extending far beyond selecting ready-made, mass-produced content" (Livingstone, 2008, p. 393). In turn, this has led to an increase in the practical capacity of individuals along three dimensions (Benkler, 2006):

1. It improves their capacity to do more for and by themselves.
2. It enhances their capacity to do more in loose commonality with others.
3. It improves the capacity of individuals to do more in formal organisations that operate outside the market sphere.

Social media has attributed to individual autonomy by enabling individuals to do more for themselves independently of the permission or cooperation of others. Firstly, "they can create their own expressions, and they can seek out the information they need, with substantially less dependence on the commercial mass media of the twentieth century", and secondly, "individuals can do more in loose affiliation with others, rather than requiring stable, long-term relations" (Benkler, 2006, p. 18). By enabling people to disengage from the mass market and access diverse and ever more personalised content, individuals can take control of their consumption, by deciding how to discover and share cultural goods according to their own needs and tastes.

Cultural good consumption relies on "word of mouth, taste cultures, and popularity, such that individual choices are dominated by information feedback over social networks rather than innate preferences and price signals" (Potts *et al.*, 2008, p. 4). As a result, consumers are heavily influenced by social networks and the increased use of social network sites has a notable role in this phenomenon (Hartline *et al.*, 2008; Potts *et al.*, 2008). These systems create an environment advantageous for

electronic word-of-mouth (Miller and Lammas, 2010; Jansen *et al.*, 2009; Duan *et al.*, 2008; Allsop *et al.*, 2007), while the nature of cultural goods makes them vulnerable to this activity – with both positive and negative effects (Duan *et al.*, 2008; Chevalier and Mayzlin, 2006). Electronic word-of-mouth is defined as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (Hennig-Thurau *et al.*, 2004, p. 39).

An individual's social environment and inherent word-of-mouth exchanges profoundly affect changes in individual values, attitudes, and behaviours (Kaplan and Haenlein, 2011; Setterstrom and Pearson, 2010; Hartline *et al.*, 2008; Brown *et al.*, 2007). "The milieu of cultural interests one creates for oneself can even be transformational, because cultural consumption not only "echoes" but also actively "reinforces" who one *can* be" (Liu, 2007, p. 252). Moreover, social influence acts as an important motivating factor and a 'powerful stimulus' for encouraging consumption behaviours, and accordingly consumers will seek information from trusted individuals to reduce uncertainty about purchasing decisions (Chu, 2013; Setterstrom and Pearson, 2010; Hennig-Thurau *et al.*, 2004). Consumers often engage in 'public information-seeking' harnessing the collective knowledge and/or opinions of others (Hennig-Thurau *et al.*, 2004). This is further exemplified by the fact that 90% of consumers trust recommendations from known contacts more than other forms of advertisement, followed by a trust in general consumer opinions posted online (70% of consumers) (Nielson, 2009).

When peer evaluation is investigated prior to purchase decisions, like with cultural goods, SNS are implicated because they support a variety of connection relationships, both known and unknown, providing access to both of the top trusted sources of advertising for consumers (Kaplan and Haenlein, 2011; Setterstrom and Pearson, 2010; Nielson, 2009). In addition, individuals who share cultural interests can find each other on social network sites, even if they are separated by geographical boundaries (Chu, 2013; Brown *et al.*, 2007; Kozinets, 1999). For example, fans of a particular musician can create a specific group on a social network site to instigate music discussion or connect with each other based on tastes expressed as a part of their social network site profile. Thus, connections are formed on SNS that explicitly centre on consumption-related interests and consequent online

interactions are based on this shared interest (Brown *et al.*, 2007; Kozinets, 1999). Users who engage in these communities of interest display unique characteristics, whereby they are more active and discerning, they are less accessible to one-on-one processes, and they provide a wealth of valuable cultural information (Kozinets, 1999). Such consumers are particularly attractive to advertisers and promoters, as they are actively engaged in communities of interest and are accessible for highly targeted marketing and advertising (Jothi *et al.*, 2011; Grange and Benbasat, 2010). SNS enables users to take control of their own consumption process and interact with other consumers, but likewise it enables companies/producers to connect with them, creating more intimate and engaging relationships (Sashi, 2012; Baird and Parasnis, 2011; Jothi *et al.*, 2011).

In general, SNS platforms affect the process of discovery, with less of an emphasis on acquisition/purchasing. However, SNS use advertising and marketing as a part of an advertising business model (Kaplan and Haenlein, 2010). Companies use SNS for promoting products directly to consumers, which ultimately influences purchasing behaviours (Mangold and Faulds, 2009). In this way, social media is a "hybrid element of the promotion mix because in a traditional sense it enables companies to talk to their customers, while in a non-traditional sense it enables customers to talk directly to one another" (Mangold and Faulds, 2009, p. 357). The influence social connections have on the consumption of cultural goods has always been relevant, but now people can gather product information from a much larger group of people (whether known or unknown, whether individual or company-based). Furthermore, they have a platform to share their own opinions with a much wider audience, giving them the ability to shape others' experiences as well.

The underlying motivation for cultural good consumers and SNS users is not utility or necessity, but enjoyment. Cultural goods are a part of a user's identity and SNS is a platform for expressing this identity. These 'personal' networks are a major source of cultural resources and network variety builds cultural variety (Erickson, 1996). Social media platforms create a space popular for a variety of consumption activities with users able to both search and play online (Pantzar 2000; Morris and Ogan 1996). File sharing is not the only activity facilitated – users have a variety of opportunities available to them, whether accessing obscure music videos or tracking and watching films (Childers *et al.*, 2002). Social media exhibits a rich variety of

information sources, which includes a wide array of non-content information as well (*e.g.* links between items, explicit quality ratings, *etc.*) (Agichtein *et al.*, 2008). Hence, the expansive nature of SNS and diversity of people and content available is extremely relevant to the study of culture and cultural goods. The capabilities of SNS are generating larger social networks with more dynamic and accessible content than was previously possible. The study of this phenomenon is relevant, as the way people choose to use these technologies shapes how SNS and user behaviour evolves.

2.2.3 Music Consumption and Social Media

Music, as an exemplar cultural good, has seen many industry upheavals, particularly in response to technological change (Dolfsma, 2000). The web has created many new challenges for the music industry and has transformed the way music is both produced and consumed (Lam and Tan, 2001). Specifically, as technology evolved, the music industry has seen a move from traditional purchasing options (*e.g.* shopping for CDs in a physical store) to using online stores, communities, and peer-to-peer networks (Beekhuyzen and Von Hellens, 2008). Music can be easily encoded in digital form and exchanged over the Internet (Molteni and Ordanini, 2003; Rupp and Estier 2003; Gosain and Lee 2001; Lam and Tan 2001). Not only are these technological advances changing the way in which music is acquired they are also changing how people are discovering and interacting with music, musicians, production companies and other music fans (Beer, 2008). This transformation shifts the power away from industry hands and into the hands of the end-user; effectuating the emergence of a 'new' music industry.

As a cultural good, music has its own characteristics that distinguish it from other goods. Music has been conceptualised as both an object and an activity by Roy and Dowd (2010). Music is embedded in everyday life; it is both pervasive and popular (Roy and Dowd, 2010). It infiltrates our everyday experiences and is used as a tool to enhance or alter our mood. It also has huge diversity with a wide variety of genres that serve an assortment of personal tastes. The music industry in the pre-internet era relied upon a model of control – whereby the industry controlled the flow of music to customers (Wikstrom, 2010). However, since the advent of social media this has radically changed.

To begin the exploration of the research objective the next section takes a more detailed look at social media and its classification within literature. Following on from this, a more in-depth examination of music consumption is conducted in order to provide a foundation from which the study of music consumption through social media can be carried out.

2.3 Social Media and Social Media Applications

Since the start of the last decade, the progression of the web has been influenced by user appropriations with an emphasis on interactive and participatory behaviours (Kaplan and Haenlein, 2010; Russo and Peacock, 2009; boyd and Ellison, 2007). The Internet stands apart from other media in facilitating its users to interact (Jarrett, 2008; Riegner, 2007). This aspect of the Internet, which is popularly termed Web 2.0 (O'Reilly, 2007), has a prevalent role in the way individuals interact with each other and with the marketplace. Web 2.0 has many names and is often referred to as social media, online communities, social software, Internet 2 technologies, social networking, and social computing (Kaplan and Haenlein, 2010; Ravenscroft, 2009; Agichtein *et al.*, 2008; Kwai Fun IP and Wagner, 2007; Parameswaran and Whinston, 2007a and b; Pascu *et al.*, 2007; Riegner, 2007; Wang *et al.*, 2007). For the purposes of this study, these technologies will be referred to as social media.

The following section defines social media by examining a variety of terms used in the literature. This leads to a classification of social media applications based on the degree of social presence, media richness, self-presentation, and self-disclosure. Six applications are described based on this classification and an updated definition of social network sites is presented.

2.3.1 What is Social Media?

This section presents a definition for each of the key terms surrounding social media (see Table 2-1). Social media terms collectively refer to Internet-based applications that facilitate the creation, organisation, and sharing of information online (Kaplan and Haenlein, 2010; Russo and Peacock, 2009) including: blogs, wikis, social bookmarking, podcasts, voice over IP, RSS feeds, social networking sites, content communities, *etc.* (McLoughlin and Lee, 2008; Chatti *et al.*, 2007; Green and Hannon, 2007; Bryant, 2006; Dalsgaard, 2006; Coates, 2003).

SOCIAL MEDIA TERMS DEFINED		
Terms	**Definition**	**Authors**
User-generated content (UGC)	Describes different forms of media content created by end-users made publicly available. UGC is produced by people without any market incentive. People make use of user-generated content via social media.	Kaplan and Haenlein (2010), Halbert (2009)
Social Software	Refers to the Web 2.0 collaborative tools and technologies including: blogs, wikis, social bookmarking, social networking, podcasts, media sharing, voice over IP, RSS feeds, *etc.*	McLoughlin and Lee (2008), Chatti *et al.* (2007), Green and Hannon (2007), Bryant (2006), Dalsgaard (2006), Coates (2003)
Social Computing	Refers to social behaviours and interactions with computing technologies and the interplay of the two. It shifts computing to the edges of the network and allows users to partake in social interaction, expertise contribution, content sharing, the collective building of new tools, dissemination of information and propaganda, and assimilating collective bargaining power.	Parameswaran and Whinston (2007a and b), Dryer *et al.* (1999)
Social Media	Internet-based applications built on the foundations of Web 2.0. Social media enables users to connect, communicate, and interact with each other and their mutual friends through Web 2.0 tools and technologies. They create pathways of information and links between users and data.	Kaplan and Haenlein (2010), Correa *et al.* (2009), Russo *et al.* (2009)
Social Networking Sites/ Services	Provide an online space for the creation of personal information profiles, where friends and colleagues are invited to access these profiles. It provides tools for interacting with other people and the exchange of personal information. Personal profiles can include any type of information: photos, video, audio files, blogs, hyperlinks *etc.*	Kaplan and Haenlein (2010), Ahn *et al.* (2007), boyd and Ellison (2007)

Table 2-1: Social Media Terms Defined

The Internet is unique in its ability to integrate into a single medium (1) different modalities of communication (*e.g.* reciprocal interaction, broadcasting, group discussion *etc.*) and (2) different kinds of content (*e.g.* text, video, images, audio, *etc.*) (DiMaggio *et al.,* 2001). These capabilities enhance the participatory nature of social media technologies and as a result are implicated in many kinds of social change (DiMaggio *et al.*, 2001). In essence, social media technologies are a set of internet services and practices that give a voice to individual users (Crook *et al.*, 2008). Social media is unique in its ability to transform online communication and collaboration patterns (Hoegg *et al.*, 2006) enabling users to participate in

communities of knowledge building and knowledge sharing (Crook *et al.*, 2008). By augmenting social and collaborative abilities, social media creates an environment of people, practices, values, and technologies (Coates, 2003). Due to their capabilities, social media encompasses a broad range of activities, including:

- **Communication:** blogs, micro-blogs, life stream, social networking, and events.
- **Collaboration and Publishing:** wikis, social bookmarking, social news, and opinion sites.
- **Multimedia:** photo sharing, video sharing, live casting, and audio and music sharing.
- **Reviews and Opinions:** product reviews, business reviews, and community Q&A.
- **Entertainment:** media and entertainment platforms, virtual worlds, social games and massively multiplayer online (MMO) games.

Social media technologies have seen a growing popularity and increase in use, becoming an important aspect in the daily lives of individuals (Kaplan and Haenlein, 2010; Trusov *et al.*, 2009). Each year there has been a significant rise in the use of social media, with many users joining social networks, reading blogs, or contributing reviews to shopping sites (Kaplan and Haenlein, 2010). However, social media is evolving rapidly through the introduction of new features, which blur the distinction between the different types of applications (Kane and Alavi, 2014).

Thus, it is important to understand current social media applications by outlining the classification undertaken by Kaplan and Haenlein (2010). This leads to an updated definition of the term 'social network sites' (SNS), which are platforms that provide social networking capabilities as well as integrating a variety of other social media capabilities.

2.3.2 Classification of Social Media Applications

This section provides a more detailed examination and a more refined definition of the various social media applications. Social media applications have varying degrees of social presence, media richness, self-presentation and self-disclosure, as displayed in Table 2-2 (from Kaplan and Haenlein, 2010, p. 62). The following social media technologies are classified firstly based on the richness of the medium

and the degree of social presence it allows; and secondly based on the degree of self-disclosure it requires and the type of self-presentation facilitated.

		SOCIAL PRESENCE & MEDIA RICHNESS		
		Low	**Medium**	**High**
SELF-PRESENTATION & SELF-DISCLOSURE	**High**	Blogs (*e.g.* Wordpress)	Social Networking Sites (*e.g.* Facebook)	Virtual Social Worlds (*e.g.* Second Life)
	Low	Collaborative Projects (*e.g.* Wikipedia)	Content Communities (*e.g.* YouTube)	Virtual Game Worlds (*e.g.* World of Warcraft)

Table 2-2: Social Media Classification adapted from Kaplan and Haenlein (2010)

Media differ in the degree of social presence, where a high social presence correlates with larger social influence (Kaplan and Haenlein, 2010). This social presence and corresponding social influence affects communication partners and their behaviour (Kaplan and Haenlein, 2010). Social presence more specifically refers to the degree of salience between communication partners during an interaction and the consequent salience of the interpersonal relationship (Yoo, 2001). It consists of the acoustic, visual, and physical contact that can be achieved between two users (Kaplan and Haenlein, 2010).

Media richness describes a communication channels set of characteristics that determine the capacity to carry rich information, "with rich information being more capable than lean information of reducing equivocality in a message receiver" (Carlson and Zmud, 1999, p. 154). Thus, media richness results in the resolution of ambiguity and the reduction of uncertainty – the richer the media, the more reduction in uncertainty (Kaplan and Haenlein, 2010; Daft and Lengel, 1986). The differences in richness are a result of the medium's capacity for immediate feedback, the number of cues and channels utilised, language variety, and personalisation (Daft and Lengel, 1986). Media richness is affected by the modality of the medium whether visual, audio, or verbal and whether contextual information sources can be provided (Ramirez and Burgoon, 2004; Burgoon *et al.*, 2002).

Self-presentation reflects the ability people have to control the impressions other people form of them through social interaction (Kaplan and Haenlein, 2010). People present an image of themselves through self-disclosure, which involves the "conscious or unconscious revelation of personal information (*e.g.*, thoughts,

feelings, likes, dislikes) that is consistent with the image one would like to give" (Kaplan and Haenlein, 2010, p. 62). Social media users have a large amount of control over this information disclosure and thus can be more strategic in managing their self-presentation (Ong *et al.*, 2011). In social media, self-presentation has been characterised into 'performances' or 'exhibitions', based on synchronous situations where performances can occur or within artifacts where asynchronous exhibitions are facilitated (Hogan, 2010). These exhibitions are central features of social media tools and include lists of status updates, sets of photos, and other aggregated content, that can be managed and redistributed by the social media user or 'curator' (Hogan, 2010).

Table 2-2 categorises six applications based on this classification. For example, blogs are associated with a high level of self-presentation and self-disclosure and a low level of social presence and media richness, while conversely virtual game worlds are in direct opposition, as a very rich medium that supports high levels of social presence, with little to no self-presentation. Hence, the following sections briefly describe these six social media applications.

2.3.2.1 Blogs

A blog or web log is defined as an information sharing technology that contains dated entries in reverse chronological order about a particular topic (Hsu and Lin, 2008; Boulos *et al.*, 2006). A blog essentially functions as an online journal (Hsu and Lin, 2008). Blogs can be maintained by an individual or a group of contributors (Boulos *et al.*, 2006), and the content created by these users may contain various formats such as links, images, videos, audio, and commentary on particular topics (Boulos *et al.*, 2006; Nardi *et al.*, 2004a; Nardi *et al.*, 2004b; Godwin-Jones, 2003). Links between data and information are created through hypertext connections of online resources and UGC (Godwin-Jones, 2003). These connections create larger online communities and form a loosely interwoven net of information (Godwin-Jones, 2003). There are also microblogs like 'Twitter' with the same underlying technology as blogs but with a limited amount of space per post. Microblogging features are often implemented as a part of social networking sites and provide information as it is happening (Zhao and Rosson, 2009).

2.3.2.2 Social Collaboration Tools

Social collaboration tools include websites with content that can be edited by anyone who has access to it (Boulos *et al.*, 2006, p. 1). Social collaboration tools include: wiki's, social bookmarking, social news, and opinion sites. These types of websites use folksonomies. A folksonomy is a blend of the words 'taxonomy' and 'folk', and stands for conceptual structures created by the people (Hotho *et al.*, 2006). Wikis in particular have grown extremely popular (Boulos *et al.*, 2006) and they facilitate collaborative content creation across large, distributed groups of members (Chui *et al.*, 2009). Other collaborative sites include product review sites, business reviews, and the use of community Q&A (where users leave reviews and comments regarding products, services, or any topic concerning the community).

2.3.2.3 Social Networking Sites

Social networking sites provide an online space for the creation of personal information profiles, where friends and colleagues are invited to access these profiles (OECD, 2007). They provide tools for interacting with other people and the exchange of personal information. Personal profiles include different types of information: photos, video, audio files, blogs, hyperlinks, *etc.* (Kaplan and Haenlein, 2010; Ahn *et al.*, 2007; boyd and Ellison, 2007). Social networks have attracted millions of users becoming an essential part of person's daily routine (Liu, 2007). Examples include: Facebook, MySpace, LinkedIn, and Bebo, which are primarily concerned with connecting individuals through a profile. 'Social network sites' as opposed to 'social networking sites' is a broader term, which is discussed in subsequent sections.

2.3.2.4 Content Communities

Content communities can be described as web-based systems, where user's upload resources and 'tag'/label them with keywords (Hotho *et al.*, 2006). The communities differ based on what kind of resources are supported (Hotho *et al.*, 2006). Resources that are shared across these communities include photos, videos, livecasting, audio, and music. One of the most popular examples of a content community is 'YouTube' with two billion videos a day watched and hundreds of thousands of videos uploaded daily (YouTube, 2011). Its popularity "lies in the combination of the content-rich

videos and, equally or even more importantly, the establishment of a social network" (Cheng *et al.*, 2007, p. 1). The use of social networking sites has become a standard way of sharing and disseminating content, and there is an overlap in these two types of social media (Cha *et al.*, 2009). Social networking capabilities are being added to many content sharing communities and many SNS enable the sharing of different forms of content.

2.3.2.5 Virtual Social Worlds and Virtual Game Worlds

Virtual social worlds and virtual game worlds can be described as platforms for watching videos, partaking in virtual worlds and playing games online either individually or as part of a 'massively multiplayer online' (MMO) gaming platform. The term 'virtual world' describes a computer-simulated environment that supports synchronous communication among multiple users (Jung and Kang, 2010). 'World of Warcraft' is one of the largest gaming virtual world (GVW) and had over 10 million subscribers at the end of 2008 (Jung and Kang, 2010). Social virtual worlds (SVWs) (*e.g.*, Second Life, There.com) in contrast stress social interaction and user empowerment (Jung and Kang, 2010). GVWs have a pre-defined structure with quest-driven behaviours while SVWs have emergent structures created by the users of the platform (Jung and Kang, 2010; Juul, 2007). SVW environments are massive multi-user platforms that provide immersive experiences through virtual representatives of an individual (*i.e.* avatars) for a variety of purposes, some of which include business and educational endeavours (Zhou *et al.*, 2010). A user can also buy and sell both virtual and real products within these virtual worlds (Zhou *et al.*, 2010).

2.3.3 Redefining Social Network Sites

Within the domain of social media, the widespread adoption of social network sites is particularly notable (Lewis *et al.*, 2008). The term 'social networking sites' is associated with specific sites like Facebook, MySpace, and Bebo. However, in a broader sense, SNS can be defined as web-based services that allow individuals to: (1) *construct a public or semi-public profile within a bounded system*; (2) *articulate a list of other users with whom they share a connection*; and (3) *view and traverse their list of connections and those made by others within the system* (boyd and Ellison, 2007, p. 211). These 'egocentric' networks are structured around an

individual at the centre of their own community; not structured according to topics or content (boyd and Ellison, 2007). SNS have experienced an extraordinary growth in popularity, notably Facebook, which has over 1.3 billion active users of which 48% use Facebook on any given day (Statistic Brain, 2014a).

SNS represent a new technological capability for web users providing an environment for social interaction and collaboration. These sites enable connections between new/unknown individuals, but more often than not, enable connections between a person's existing extended social network (boyd and Ellison, 2007). Through SNS, users create and share a wide variety of content (Agichtein *et al.*, 2008; Sledgianowski and Kulviwat, 2008; boyd and Ellison, 2007) and embed content from other social media and web sites (boyd and Ellison, 2007). Embedding refers to the integration of content/applications into a web page, while the original format is maintained (Dalsgaard, 2006).

As well as dedicated SNS; UGC-focused web sites (*e.g.* YouTube; Flickr) increasingly supply social networking features enabling their users to share content in a social setting (Kumar, 2009). Indeed, SNS functionality is beginning to appear in desktop software as well, such as Apple's iTunes music player (Apple, 2010). SNS support interaction, collaboration, feedback, conversation, and networking but they are also flexible and modular (McLoughlin and Lee, 2007). Twitter is a social network site and microblogging tool. It was one of the fastest-growing social network sites in 2009, with 105 million registered users by April 2010 (Rui *et al.*, 2010) which has grown exponentially since its inception. Twitter currently has over 640 million users (as of April 2014) with 58 million tweets (posts) per day (Statistic Brain, 2014b). Twitter has great potential as a music-marketing tool because of the importance of word-of-mouth exchanges and information diffusion among consumers (Rui *et al.*, 2010; Jansen *et al.*, 2009).

These sites have a number of technological capabilities that support a wide range of interests and practices (Liu, 2007). This is because they share a number of technical features while conversely supporting unique capabilities (Beer, 2008; boyd and Ellison, 2007; Liu, 2007). The various capabilities include: self-presentation in an online profile, the accumulation of connections, the ability to post comments on pages and profile pages, joining virtual groups based on common interests, and also the ability to learn about each other's hobbies, interests, music tastes, and romantic

status through the social network profile (Trusov *et al.*, 2009; Ellison *et al.*, 2007; Rosen and Sherman, 2006). In some cases, they also support the exchange of photos/videos, supply instant messaging, or enable built-in blogging (boyd and Ellison, 2007). Based on the capabilities provided by SNS, two types of user behaviours have been identified: information seeking and information sharing, with a number of factors that influence both (Park *et al.*, 2014). For instance, when seeking content, users assess the trustworthiness of the poster, the quality and usefulness of the information and any possible entertainment value attached (Park *et al.*, 2014). For sharing, users are influenced by social factors like seeking reputation or a sense of belonging (Park *et al.*, 2014). Users can be further categorised based on the behaviours displayed, together with how they are perceived by others in the network (Java *et al.*, 2007):

- **Information Source:** users with a large number of followers who become a valuable source of content for the network. The posts may vary between regular posting intervals to infrequent posting.
- **Friends:** some users may follow known connections whether friends, family, or co-workers, they may also be an information source or seeker type.
- **Information Seeker:** these users may post rarely, but they follow other users regularly to streamline their personalised timeline and access content.

Users also differ across socioeconomic status, ethnicity, gender, and age, as well as having different levels of experience and autonomy, all of which influence usage behaviours (Hargittai, 2007). The various background characteristics of people, the purpose of use, and the varying experience levels, have all been shown to influence SNS use and web use in general (boyd and Ellison, 2007; Hargittai, 2007).

2.4 Music Consumption

The music industry has undergone a major transformation because of the introduction of digital technologies and the ability to share content over the Internet (Molteni and Ordanini, 2003; Healy, 2002). The way in which music is produced and marketed by record companies, musicians, and the media has drastically changed with each new development. But more specifically, it is the change in the way consumers seek and consume music content that has created the most disruption for the music industry (Wikstrom, 2010; Singh *et al.*, 2006).

The following section details the progression of the music industry, highlighting the major changes that have resulted because of technology and social media. The characteristics of music consumers are then explored before examining the process of consuming music (*i.e.* the music consumer activity cycle). Six tasks associated with music consumption behaviours are defined and categorised into three types of activities: information seeking, information encountering, and information sharing.

2.4.1 The Progression of Music Consumption

When Edison invented the phonograph in 1877 it caused major disruption to the music business model. There were laws in place for the distribution of sheet music and the use of a composer's pieces for public performances. But when recording technology became a new dynamic to contend with, no laws were in place to protect an artist's work when the music was recorded and re-distributed (Lessig, 2004). Lessig (2004, p. 45) has quoted various publishers and composers of the time who stated:

> *The innovators who developed the technology to record other people's works were "sponging upon the toil, the work, the talent, and genius of American composers," and the "music publishing industry" was thereby "at the complete mercy of this one pirate."*

The music industry has progressed over the years, from the first magnetic tape (1927), the invention of the long playing (LP) record (1948), to the use of compact discs (1976 to 1982). Furthermore, the industry has witnessed the change from live concerts/musical performances, to listening to the radio and the introduction of television. But one of the biggest changes for the music industry has been the inception of MP3s in 1998 paired with the capabilities of the web when file sharing became widespread. As Madden (2009, p. 6) stated:

> *If the music business was the canary, then the MP3 was its carbon monoxide, choking an industry that had built its empire on the clean, regulated air of analog music products. First, music went digital. Then the MP3 compression format shrunk those big music files into transportable size. After that, there was little hope of record companies making it out of the mine without some serious lung damage.*

Before the widespread use of the Internet, sources of music included: a mix of live and recorded performances, traditional advertising, acquisition of physical products

and the sharing and discussion amongst friends, family and other connections (see Table 2-3).

PRE-INTERNET ERA MUSIC SOURCES	
Type	**Music Source**
Performances/ Advertising	– Live concerts/music performances – Radio – Television – Physical adverts
Retailers	– Traditional brick and mortar stores
Network connections	– Word-of-mouth (*e.g.* face-to-face) – Sharing physical music products (LP/tape/CD)

Table 2-3: Pre-Internet Era Music Sources

In the new music economy, music firms lose their ability to control the flow of information because of increased connectivity (Wikstrom, 2010). New mediums of distribution (*i.e.* the Internet) create different structures from previous hierarchical media (Wikstrom, 2010). A fall in album sales over the past few years is apparent, with a rise in digital and single sales (Nielsen, 2009; Bauxmann *et al.,* 2005). The old formula for producing and promoting an artist and selling their music is becoming more and more irrelevant, as musicians are now capable of offering their music directly to fans, bypassing the intermediaries in the old music business model (Dolfsma, 2000). The relatively cheap and convenient digital formats music is now available on, gives both musicians and consumers more control over production and consumption (Leyshon, 2001; Dolfsma, 2000). New music industry dynamics are summarised as: (1) high connectivity and little control, (2) music provided as a service, and (3) increased amateur creativity (Wikstrom, 2010).

Furthermore, the iTunes application facilitates users to pick and choose individual songs from albums and buy them separately. Consumers have access to more choice and can discover music outside of mainstream tastes (Anderson, 2006). 'Filler' songs on albums are no longer appreciated by music fans and can be ignored completely; with more and more consumers opting out of buying music they do not want (Regner *et al.,* 2009). The world of MP3 players, playlists, shuffle, and songs over albums is becoming the norm. Where once music was selected and promoted for the masses, now progressively more unsigned artists are producing their own music while promoting on the web without the help of the industry (Cha *et al.,* 2009; Regner *et al.,* 2009; Dolfsma, 2000). Table 2-4 adds new sources of music consumption to the

previous table, accounting for some of the changes in the post-internet era. Traditional methods are still used, but new forms of music discovery are supplementing the consumption process, including but not limited to: content sharing communities, music streaming services, and social network sites. Consumers use a combination of these sources to create an individualised consumption process.

POST-INTERNET ERA MUSIC SOURCES		
Music Source	**Examples of Advancement**	**Technologies**
Performances/Advertising		
Live concerts/music performances	– Online live performances – Video streaming performances	Skype, Google video chat, YouTube, Vine
Radio and Internet radio/ TV and Internet TV	– Internet radio sites – Online multimedia sites	Shoutcast, Last.fm, Sidereel, Hulu
Physical and website advertisements	– Online advertising: banner ads, pop ups, sponsored search *etc.*	Google adverts, Facebook adverts
Artist/band websites and online profiles	– Artist/band private websites – Artist/band profile pages	Radiohead.com, Facebook, Twitter
Dedicated music sites (content providers)	– Sites dedicated to music fans to access artist and band music	Last.fm, Bandcamp, SoundCloud
Retailers		
Traditional brick and mortar stores	– Online web presence for buying physical products	HMV.com, Tower Records, Best Buy
Virtual stores (physical and digital music)	– Physical and digital purchases online	Amazon, eBay, iTunes, Napster
Online streaming services (digital music and networking capabilities)	– Streaming music online; subscription/advertisement based revenue model	Spotify, Grooveshark, Deezer, Pandora, Napster, Rhapsody
Network connections		
Word-of-mouth recommendations	– Social networking sites, media sharing sites, blogs, forums, websites, product reviews	Facebook, YouTube, Twitter, Amazon, YouTube, iLike
Music file sharing (digital and physical)	– Sharing digital music online – Sharing digital music offline	ThePirateBay, BitTorrent, isoHunt

Table 2-4: Post-Internet Era Music Sources

Because of their massive popularity, SNS are used to advocate viral marketing of products with the intent to reach millions of online users (Cha *et al.,* 2009; DiMicco *et al.,* 2008; Thelwall, 2008). Consumers more and more are now going online to seek music content (Bockstedt *et al.,* 2005; Bhattacharjee *et al.,* 2003; Balaban, 2001; Leyshon, 2001). The social/cultural nature of these goods means that people are influenced by their network of connections and use different tasks to find and consume them. Music is displayed and shared on an SNS profile, which serves to

reinforce taste performances (Liu, 2007). It is not just friends and family that users connect with on SNS, they also interact directly with their favourite bands/artists (Ellison *et al.*, 2007; Acquisti and Gross, 2006; Lampe *et al.*, 2006). Social relations and culture are so intertwined it has become difficult to separate the two (Lewis *et al.*, 2008). Furthermore, SNS have enabled social groups to find each other and connect based on music, moving otherwise offline disconnected groups into an accessible online sphere, as Beer (2006, p. 6) states:

> *Music, as it has always been, is one connector around which these (now virtual) social groups meet and relate. Music is one of many cultural aspects and commodities that is deeply interwoven into these complex, fluid, and non-linear online communities of virtual friends.*

Thus, in a self-directed approach users are taking control of their consumption, connecting with people online based on music and building personal spaces to suit individual needs. According to Nielson (2012) radio is still the dominant way people discover music. However, this is followed by friends and relatives – highlighting the impact of word-of-mouth, whether offline or online through social networks. YouTube is the third most popular way for discovering music, another online source with social networking and content sharing capabilities (Nielson, 2012):

- 48% discover music most often through the radio
- 10% discover music most often through friends/relatives
- 7% discover music most often through YouTube

What's more, positive recommendations from a friend are most likely to influence purchasing decisions, and users are also influenced by music blogs while actively sharing and uploading music to social network sites themselves (Nielson, 2012):

- 54% are more likely to make a purchase based off a positive recommendation from a friend
- 25% are more likely to make a purchase based off a music blog/chat rooms
- 12% are more likely to make a purchase based off an endorsement from a brand
- 8% of all respondents share music on social networking sites, while 6% upload music.

The discovery process has been enhanced by these new sources of content, which ultimately impact purchasing behaviours. Recommendations from friends and family are still relevant to the way an individual engages with music consumption, however now it is on a much larger scale, online using social network site environments.

2.4.2 Music Consumers

Music consumers are constrained by personal taste, which shapes seeking behaviours through preferences and past experiences (Lee and Downie, 2004). Like cultural goods, "music is an experience good where horizontal product differentiation and taste heterogeneity are important" (Peitz and Waelbroeck, 2006, p. 908). The characteristics of music seekers have been divided into a number of categories outlined in Table 2-5 based on the research by Lee and Downie (2004). This table presents a variety of preferences that music seekers display. For example, music seekers value online resources for music information and recommendations, and the preferable sources of music content are the ones already familiar to them. Music seeking is viewed as a socially instigated act, further emphasising social network sites in this paradigm.

MUSIC SEEKER CHARACTERISTICS	
Concept	**Characteristic**
Music information needs	– Descriptive metadata and extra-musical information providing commercial and experience enrichment
Reason for searching for music information	– Users seek music as an auditory experience – To assist in the building of music collections – For verifying or identifying works, artists, lyrics, *etc.*
Music-Related Online Activities and Music-Related Materials Sought	– Users value online music reviews, ratings, recommendations, and suggestions – Users prefer online resources for extra information
Places Visited for Music Information Search	– Users have definite preferences regarding where they physically go to seek music information
Persons Consulted for Music Information Search	– Personal familiarity with search helpers is a key determinant for music information seekers
Sources That Triggered Music Information Searches	– Music information-seeking should be seen as a socially instigated act
Preferred Search/Browse Options	– Music information seekers employ public knowledge and/or opinions for searches

Table 2-5: Music Seeker Characteristics (Source: Lee and Downie, 2004)

In keeping with SNS users, individual characteristics such as gender, age and experience are also likely to exert influence on music consumption, for example,

experienced consumers are more likely to appreciate benefits of a high-quality sound carrier than less experienced consumers (Walsh *et al.*, 2003). Younger consumers are also likely to have different tastes to older consumers and may display a greater affinity to web technologies, resulting in diverse consumption behaviours across different user types (Walsh *et al.*, 2003).

2.4.3 Music Consumption Activities

The process of consuming music involves a number of phases that influence each other (Walsh *et al.*, 2003). A consumer activity cycle (Vandermerwe, 2000) was adapted and modified for the music consumer by Regner *et al.*, (2009, p. 337). It is composed of three phases: (1) pre-consumption (discovering music), (2) during consumption (listening to music), and (3) post-consumption (organising music). Figure 2-1 displays the adapted cycle.

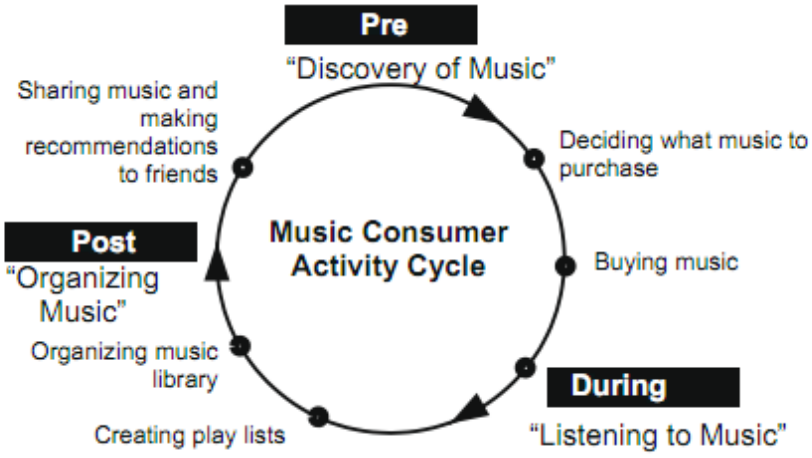


Figure 2-1: Music Consumer Activity Cycle (Regner *et al.*, 2009, p. 337)

Pre-consumption of music concerns the discovery of music through alternative channels, *e.g.* radio, friends, magazines, and live performances (Regner *et al.*, 2009). However, because of the subjective value of music it is necessary for a user to experience the good in advance, making sampling an important aspect of the consumption cycle (Regner *et al.*, 2009). This stage begins when a consumer identifies a need for music, which spurs action (Walsh *et al.*, 2003). The *consumption* phase consists of a listening period after the good has been acquired. Consumers are able to transfer their music to media devices and spend time familiarising themselves with their collection (Regner *et al.*, 2009). *Post-consumption* is the organisation phase; consumers are able to manage and edit their

music, creating mixes/playlists of songs of their own choosing and subsequently sharing this music or music information with their friends (Regner *et al.*, 2009).

The entire activity cycle is relevant in this study, as many SNS provide key aspects to pre- and post-consumption behaviours, such as discovering, sampling, and sharing music. Learning is inherent throughout the entire cycle. Users are continually learning throughout the initial stages of consumption to the end. Learning involves information acquisition and interpretation (Huber, 1991) and includes a feedback loop which exerts a strong impact on future discovery, where satisfaction serves to reinforce future behavioural responses (Holbrook and Hirschman, 1982) resulting in a change to behaviour (Huber, 1991) and/or to cognitive maps (Friedlander, 1983). Thus, as people consume and experience new music, they update their beliefs influencing tastes and future consumption behaviours.

The following sections present six generic consumption tasks, categorised into three types of activities: (1) information seeking, (2) information encountering, and (3) information sharing. These activities are relevant to the process of music consumption in the context of social network sites. Within each type of activity, specific consumption tasks are outlined (*e.g.* search) and it is specified where in the consumer activity cycle the activity occurs.

2.4.3.1 Information Seeking Activities

In the consumer behaviour literature consumers are described as 'problem solvers' or in hedonic terms as consumers seeking fun, enjoyment, fantasy, sensory, and emotive aspects (Hirschman and Holbrook, 1982). Two types of consumer behaviours are identified: (1) goal-directed activities; and (2) experiential activities (Novak *et al.*, 2003, p. 4).

1. **Goal-Directed:** extrinsic motivation; instrumental orientation; situational involvement; utilitarian benefits/value; directed (pre-purchase) search; goal-directed choice; cognitive; work; planned purchases/repurchasing.
2. **Experiential:** intrinsic motivation; ritualized orientation; enduring involvement; hedonic benefits/value; non-directed (ongoing) search/browsing; navigational choice; affective; fun; compulsive shopping/impulse buys.

In the utilitarian view of product consumption, consumers purchase products in a goal-directed efficient manner (Childers *et al.*, 2002). In this view of consumer behaviour, the emphasis is placed on information seeking which involves deliberate actions by the user. This contrasts with hedonic consumption, where the process is more about the fun of exploring or browsing and the resulting 'entertainment' and 'enjoyment' factors (Childers *et al.*, 2002; Hirschman and Holbrook, 1982).

Hence, information seeking in this research involves two tasks: (1) searching and (2) exploring tasks. Information seeking is a part of the 'pre-consumption' phase of the consumer activity cycle. Consumers may have specific purchase requirements or just intend to gather music information in a general way.

Searching

Searching, in this study, is described from a decision-making perspective, where a problem is recognised and search activity follows to help solve that problem (Bloch *et al.*, 1986). Search is defined as the process of gathering information and identifying purchase options by way of navigation, information acquisition and/or some exploratory behaviour (Lumpkin and Dess, 2004; Holbrook and Hirschman, 1982). Fundamentally, search is goal-directed in nature and involves extrinsic motivations (Novak *et al.*, 2003).

Exploring

Exploring or browsing accounts for the search activity that is recreational in nature or occurs without a recognised consumption need (Bloch *et al.*, 1986). Exploring is a form of 'overt search'; it is experiential and enjoyable and constitutes ongoing search activities (Holbrook and Hirschman, 1982; Claxton *et al.*, 1974). "Information gathering is a continuous process, even when the purchase is not foreseen. As a result, when the decision is made to make a purchase, relatively little explicit search is required" (Claxton *et al.*, 1974, p. 35). Thus, exploring is intrinsically motivated and involves experiential searching and browsing (Novak *et al.*, 2003).

2.4.3.2 Information Encountering Activities

Information encountering represents the discovery aspect of information searching or exploring. In some cases users encounter content that they have deliberately sought through seeking tasks. However, an aspect often overlooked in consumer behaviour are the accidental discoveries users make when not seeking content, termed encountering or serendipity (Race, 2012; Piao and Whittle, 2011; Mislove *et al.*, 2006; Erdelez, 1999). Users often follow links they had not intended to query, thus discoveries in this context may firstly be a result of locating and accessing content that was specifically sought, or secondly, encountering content accidentally or incidentally when seeking/doing something else. This is particularly relevant in SNS, as the activity feed that structures the content for users is designed to promote discoveries without a planned aspect to the behaviour (Race, 2012). Thus, information encountering includes deliberate and accidental consumption, which consequently may result in sampling. Sampling is especially important for music consumption (Regner *et al.*, 2009; Peitz and Waelbroeck, 2006) and provides users with experience that helps to decrease product uncertainty (Bounie *et al.*, 2005; Heiman *et al.*, 2001). Digitilisation and digital goods have enabled new forms of sampling. Consumers can listen to snippets of songs on iTunes to help purchasing decisions, or watch live performances of musicians on YouTube, and also download entire albums for free through peer-to-peer (P2P) networks. The sampling "property of digital copies can potentially lead an internet user to purchase a CD that he or she would never have purchased without this information" (Bounie *et al.*, 2005, p. 1).

Hence, information encountering involves the (1) discovery and (2) sampling tasks. Information encountering describes the stage of consumption whereby a user has discovered or encountered content, whether they were seeking it or not. These activities occur in the 'pre consumption' and 'during consumption' phases, where a user can experience the good and thus make post-discovery evaluations, guiding future behaviour decisions and activity (Walsh *et al.*, 2003).

Discovery

Discovery can be described as the reduction of uncertainty about the world through access to previously unknown information (Goodchild, 2000). In the context of consumer behaviour, discovery is defined as finding something new and unfamiliar. In essence, a consumer gains information/knowledge previously undiscovered. The availability of information on the web facilitates online consumers to discover and evaluate products that would normally have remained hidden through conventional retail environments (Brynjolfsson *et al.*, 2003).

Sampling

Sampling includes many different activities and is used as a direct source of information and experience (Bounie *et al.*, 2005; Heiman *et al.*, 2001). Sampling can include various aspects from listening to music, going to live concerts, looking at album covers, watching videos on YouTube to downloading songs or albums (Gaffney and Rafferty, 2009; Bounie *et al.*, 2005; Walsh *et al.*, 2003). Sampling like exploring increases learning and exposure to new things (McLeod, 2005). Sampling is intrinsically motivated; a pleasant experience for a consumer and is generally preferred over advertising as a means of product exposure (Heiman *et al.*, 2001; Smith and Swinyard, 1983).

2.4.3.3 Information Sharing Activities

When consumers acquire cultural goods, it is important for them to share their experiences with social connections as a way of communicating their opinions and presenting their identity (Livingstone, 2008; Liu, 2007; Throsby, 2003). SNS are particularly good at this by facilitating electronic word-of-mouth exchanges and spreading content far and wide (Miller and Lammas, 2010; Jansen *et al.*, 2009; Duan *et al.*, 2008; Allsop *et al.*, 2007). An interaction occurs, which facilitates an individual to communicate with another user or participate in social events. During an interaction, users may share opinions, recommendations, and music content (in a variety of formats – which promotes sampling tasks).

Hence, information sharing involves (1) interacting and (2) sharing tasks. Information sharing occurs in the 'post-consumption' phase when a user wants to propagate the content they have discovered or as a means of expressing their tastes to their social network. When interactions occur and content is shared, it encourages

information seeking and information encountering activities, as content is made available and accessible to others.

Interacting

Interacting refers to "descriptive aspects of social events in which persons participate" (Specht, 1986, p. 222). Additionally, an interaction can be defined as "an action (or reaction) which passes from one human being to another" (Riva and Galimberti, 1998, p. 15). In the context of social networks, interactions can be seen as the reciprocal influence of individuals upon one another's actions when in one another's presence (Lamb and Davidson, 2002). Interaction is directly related to sharing, where sharing involves interaction.

Sharing

Sharing is defined as passing on information through the voluntary act of making information available to others (Jarvenpaa and Staples, 2000) and involves the creation and publishing of content (Cha *et al.*, 2007). Information sharing embeds the notion of 'willingness to share', which distinguishes it from information reporting (Jarvenpaa and Staples, 2000). This information sharing represents the activities in the post-consumption phase of the consumer activity cycle, after seeking behaviours and discoveries have occurred. In order to share music information or content an individual must interact – either using a communication technology or using offline methods.

Having analysed the literature around music consumption and social networks there is a need to theorise the relationship between the two to enable a more complete exploration of the area.

2.5 Theoretical Lens

Information systems (IS) research employs a number of theories to understand the use of IT artifacts. Many traditional models in IS focus on either initial use of IS, with models of user adoption and acceptance, or the continued use of information systems based on post-acceptance models (Al-Natour and Benbasat, 2009; Larsen *et al.,* 2009). In addition, these models frequently concern individuals in an organisation and the use of IT artifacts as productivity tools (Al-Natour and Benbasat, 2009). These models are based on a set of utilitarian beliefs, like perceived ease of use and perceived usefulness, and assume some form of productivity gain from the technology use (Al-Natour and Benbasat, 2009; Rosen and Sherman, 2006).

With the widespread adoption of social media and social media applications, many of these theories are not suitable to understand the use of IS and the behaviour of individuals in these spaces. Social media are hedonic information systems used in a social setting to share personal information, dissimilar to organisations that have formal rules where technology is used for work. Furthermore, they are complex systems that evolve with continuous user interaction. Users are not seeking productivity gains by using these technologies and thus models based on utilitarian beliefs are not relevant for studying them (Rosen and Sherman, 2006).

Individuals create a personal space within social media technologies and adopt various features of the technology. These socially constructed personal environments consist of three-dimensional structures, which contain focused subsets of information highly relevant to a particular user (Waterworth, 1999; Abrams *et al.*, 1998). Information spaces on the web allow users to manipulate, edit and label spaces and then customise the material that they have found (Waterworth 1999). It is therefore necessary to apply a theory of understanding that encompasses this complex interaction – inadequately explained using concepts like perceived usefulness and perceived enjoyment. It is important to instead focus on the interaction between the individual (and all that comprises an individual) and the system as a whole.

With this in mind the following sections firstly describe the complex nature of social media with the intention to demonstrate the socially constructed beliefs of a system's capabilities, determining what it is for and how it can be used. Affordances are then proposed as the theoretical lens for the study. Affordances are compared with competing theories of IS use, to assess suitability in the context of the research phenomenon. Deemed most appropriate, affordances are then defined before describing how to apply them to the research context.

2.5.1 The Complexity of Social Media Use

This section seeks to show the relevance of affordances in the context of the research area by demonstrating the complexity of social media use. The use of social media emerges over time through user interactions and is thus socially constructed. Firstly, the technology provides a specific set of capabilities, then as affordances are formed and actual interactions occur with the technology, its use evolves. This evolution of technology is shaped by people and culture and develops based on the needs, values, and interests of people (Castells, 2006). Affordances are appropriate because of this emergent use, encompassing user interaction and feedback. The following section uses Twitter as an example of how a social media site evolves and how users shape this process.

The original premise of Twitter was based on a very simple idea, to let a group of friends know what you are up to. An interview with Jack Dorsey (one of the creators of Twitter) by Davis Sarno (2009) from the L.A. Times, illustrates what the creators had in mind when the idea for Twitter was being formed:

> *This aspect where you can just locate your buddy list and at a glance locate what your friends are up to, or what they say they're up to… but it all happens in real time, and you can update it from anywhere.*

Twitter was never intended as a platform for sharing media resources but as a kind of text message service online. Its intentions are clear from the way the name was decided upon:

> *...we came across the word 'Twitter', and it was just perfect. The definition was 'a short burst of inconsequential information,' and 'chirps from birds'. And that's exactly what the product was.*

But as Dorsey said himself in the following extract, meaning is applied by the users, what is useful to some may not be for others – the messages posted are specifically meant for a bounded group of people, it was not about sharing meaningful resources to the world, but providing updates about the here and now to a group of friends.

> *The whole bird thing: bird chirps sound meaningless to us, but meaning is applied by other birds. The same is true of Twitter: a lot of messages can be seen as completely useless and meaningless, but it's entirely dependent on the recipient.*

What is also interesting about Twitter is that it did not originally identify as a social network site, but is now commonly categorised as one (Sarno, 2009). What was a parsimonious message service to update friends about what was happening, evolved over time with user engagement. This is where the intended functionality of a technology becomes blurred by the perceptions of the user.

Even though the premise of the technology is very simple, it has become a complex structure, where meaning must be learned by interacting with the system and the existing user base, as seen in the screen shot below (Figure 2-2). When in doubt, users turn to the community to ask how they should be using Twitter. Even though Twitter was established eight years ago in 2006, users are still asking what it is for and how to do it properly.



Figure 2-2: Twitter Screenshot of "How do I Twitter?" (captured July 2014)

Furthermore, as well as adopting socially constructed uses of the platform, users also influence future functionality. One example where users created a new use/feature for Twitter is the creation of 'hashtags' by Chris Messina – first posed to other Twitter users in the post (*i.e.* tweet) below (Figure 2-3). This in turn led to the concept of 'trending topics' and new ways of searching and aggregating content, completely revolutionising the capabilities of the Twitter platform and what is was for.

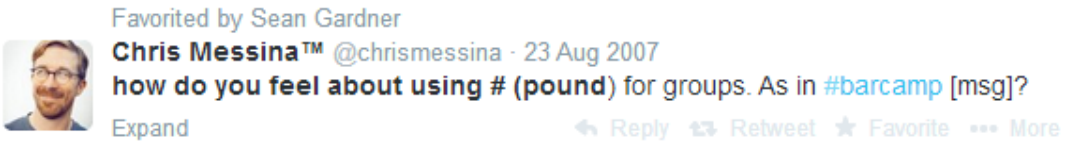


Figure 2-3: Twitter Screenshot of Hashtag Instigation (captured July 2014)

Another example of emergent behaviours on Twitter is what is now called a 'subtweet'. A subtweet is an action carried out whereby instead of mentioning a user's handle (*e.g.* @chrismessina), which links them to the conversation, no @ symbol is used to direct the post – essentially constituting the act of talking about somebody without their knowledge. The following post (Figure 2-4) is an example where users are trying to further understand this activity, by formalising exactly what constitutes a subtweet (Reinsberg, 2013).

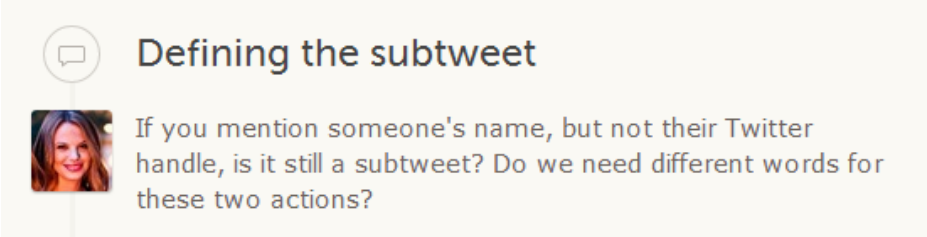


Figure 2-4: Buzzfeed Screenshot of "Defining the subtweet" (captured July 2014)

These socially constructed definitions of user action result in a change to user attitudes and beliefs, an example of which can be seen in the following Twitter exchanges (Figure 2-5). What is clear is that there are implicit rules about what users should and shouldn't do, like for example, tweeting too much. Tweeting too much is considered taboo by some and as a result a person may lose followers, but equally important is what kind of content is tweeted and the implicit rules about what should and shouldn't be tweeted. Users seem to have different perceptions about the use of Twitter and what it is for.

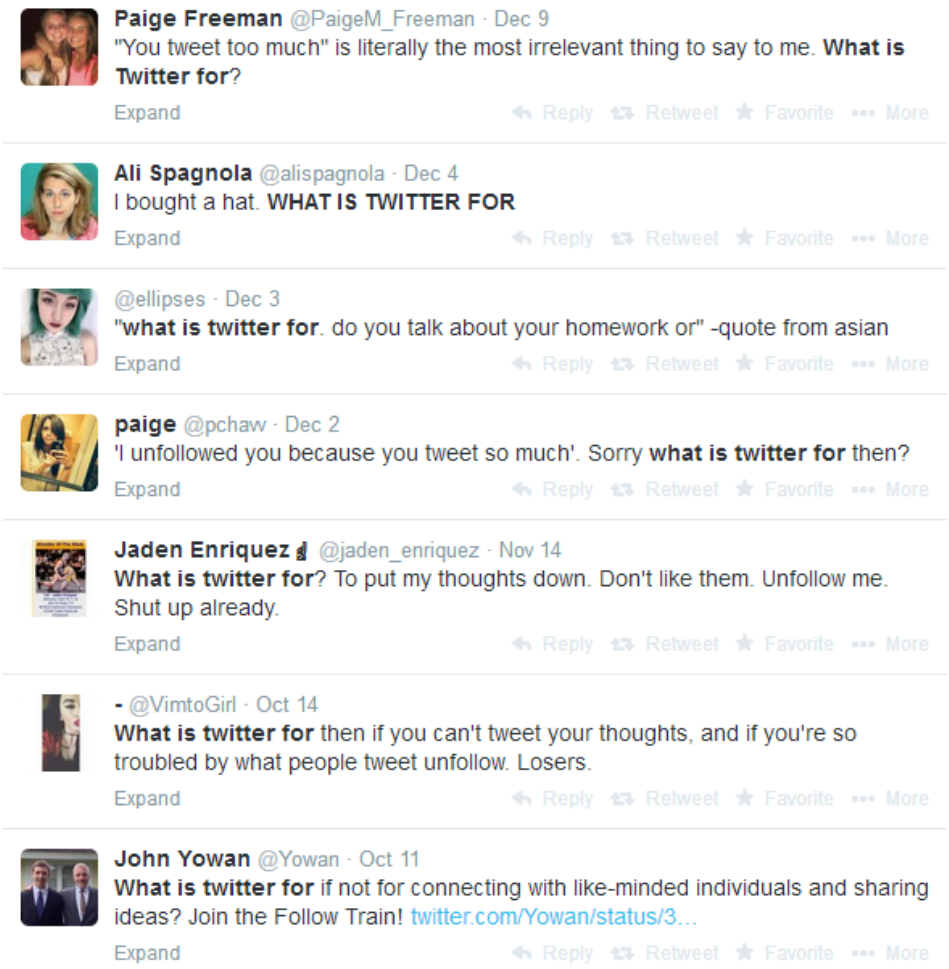


Figure 2-5: Twitter Screenshot of "What is Twitter for?" (captured July 2014)

This is true in the case of many social media technologies. Is Facebook a platform for staying in contact with old friends and forming new connections (boyd and Ellison, 2007) or can it be utilised by students and educators for teaching and learning purposes (Madge *et al.*, 2009), or is it all of the above and a marketing and advertising tool for reaching large audiences and spreading product information (Chu et *al.*, 2013)? This is where user characteristics begin to influence the evolution of these technologies, as well as how users decide what a technologies purpose is and how to employ it as such.

Hence, affordances are proposed as a theoretical lens to study the use of SNS for the consumption of cultural goods. Affordances are a combination of perceived and actual properties of an object and offer strong clues about functionality (Torenvliet, 2003; Norman, 2002). As argued in this section, the functionality of social media sites is heavily influenced by user engagement often being used for unintended purposes. To account for this, affordances encompass the characteristics of a system

and the perceptions of the people that interact with it. By applying the concept of affordances, this research can identify how the technology is perceived by its users for a set of tasks (whether it was an intended capability of the technology or not). This will reveal the perceptions of the users and the perceived capabilities of the system in the context of the research phenomenon (*i.e.* cultural good consumption). But first it is necessary to compare affordances with competing theories of IS use to assess the suitability of the theoretical lens. The following section does this by reviewing a number of competing theories and justifying the application of affordances to the study of the use of SNS for the consumption of cultural goods.

2.5.2 Justifying Affordances

In order to understand the use of social network sites for the consumption of cultural goods, this section assesses competing theories of system use in the information systems discipline. The focus of this analysis is to understand which theories are most appropriate for investigating the interaction between a set of users and a complex social technical artifact, based on the discussion above. Competing theories are compared in Table 2-6 and discounted based on relevancy to the research phenomenon. Theories included in the comparison are the technology acceptance model (TAM), expectation-confirmation (EC) model of IS continuance, user acceptance of hedonic information systems, adaptive structuration theory (AST), task-technology fit (TTF) theory, and the theory of affordances. Following the table is a discussion examining the properties of the competing theories. Many of the theories are not appropriate for three reasons:

1. They are not suitable for understanding hedonic system use.
2. They are insufficient at explaining user-artifact interactions (*i.e.* complex systems).
3. They are not suitable to the research context.

The most appropriate theories for understanding user-artifact interactions are adaptive structuration theory and the theory of task-technology fit. Aspects of these theories are useful to this study. However, they do not completely address the context of the research problem and hence are not suitable on their own.

THEORETICAL LENS SUITABILITY				
Theory	**Description**	**Main Constructs**	**Focus**	**Suitability**
Technology Acceptance Model (Davis, 1989)	Predict a user's IS adoption intentions and behaviours	▪ Perceived ease of use ▪ Perceived usefulness ▪ Intentions to use	Acceptance and use of an IS in the context of utilitarian systems	– Not suitable for measuring hedonic system use – Insufficient at explaining user-artifact interactions (*i.e.* complex systems)
Expectation-Confirmation Model of IS Continuance (Bhattacherjee, 2001)	Examines cognitive beliefs influencing intention to continue using IS	▪ IS continuance intention ▪ Satisfaction ▪ Perceived usefulness ▪ Confirmation	Satisfaction with IS use and intention to continuing using IS based on post-acceptance	– Not suitable for measuring hedonic system continuance – Insufficient at explaining user-artifact interactions (*i.e.* complex systems)
User Acceptance of Hedonic Information Systems (Van der Heijden, 2004)	Predicts usage intentions for hedonic information systems	▪ Perceived ease of use ▪ Perceived usefulness ▪ Perceived Enjoyment ▪ Intentions to use	Acceptance and use of an IS in the context of hedonic systems	– Insufficient at explaining user-artifact interactions (*i.e.* complex systems)
Adaptive Structuration Theory (DeSanctis and Poole, 1994)	Understand the interplay between technical artifacts, social structures, and human interaction	▪ Structural features ▪ Spirit ▪ Groups internal system ▪ Appropriation ▪ Decision outcomes ▪ New social structures	Actual interactions between a user and an artifact to help understand a group's structure and function; for organisational communication and group decision making	– Not suitable for understanding individual interactions and outcomes – Not suitable for studying cultural good consumption, distinct from organisational decision making processes
Task-Technology Fit Theory (Goodhue and Thompson, 1995)	Impact of technology on individual performance by measuring the degree to which a technology assists an individual in performing tasks	▪ Task characteristic ▪ Technology characteristic ▪ Task-technology fit ▪ Performance impact ▪ Utilization	Fit between a user's goals and the capabilities of an IT artifact in an organisational context	– Not suitable for measuring hedonic system use – Insufficient data on the context of tasks for the measurement of performance impacts and utilisation
Theory of Affordances (Markus and Silver, 2008; Norman, 2002; Gaver, 1991)	Examines perceptions of a user about what a system can do (*i.e.* potential uses)	▪ Technical artifact ▪ User group ▪ Affordance (perceived capability)	Relationship between a technical artifact and a specific user and task	– Suitable for understanding user-artifact interactions (*i.e.* complex systems) – Suitable to research context by accounting for user and task characteristics in relation to technical artifact

Table 2-6: Theoretical Lens Suitability

Frameworks for adoption, like the technology acceptance model (TAM) (Davis, 1989), predict a user's adoption intentions and behaviours that address the performance benefits of an IT artifact (Davis, 1989). Additionally, frameworks for continued system use like the expectation-confirmation model of IS continuance (Bhattacherjee, 2001) – adapted from EC theory (Oliver, 1977) – examine cognitive beliefs influencing IS continuance based on post-acceptance. However, these models do not sufficiently explain the how and why of consuming cultural goods using hedonic information systems, like social network sites. For example, Rosen and Sherman (2006, p. 1218) maintain that:

> *if one applies Davis' measurement of usefulness, websites like MySpace and Facebook would be considered counterproductive, often interfering with the productivity of people in the workplace. These systems, however, have value when they are used for hedonic purposes. Since many hedonic information systems are used as social networking tools, what is missing from a model like TAM is a measure of worth of the social network.*

Even by extending these frameworks to address hedonic system use[2], the frameworks still fall short in explaining complex user-artifact interactions and the relationship between social media users and social media platforms. IS theory has had to adapt to support changes in technology and the changing role of information systems. In lieu of this, IT artifacts have come to be viewed, not just in the context of enhancing productivity, but in reference to what tasks the technology supports and the context of these tasks (Al-Natour and Benbasat, 2009; Benbasat and Zmud, 2003). This advancement has resulted in the emergence of second-generation adoption models that concern how an IT artifact is utilised in contrast with explicitly feature-centric research (Al-Natour and Benbasat, 2009). This view focuses on the dynamic interactions between people and technology, taking into account the

[2] IS theory has addressed hedonic system use by extending the TAM model. Perceived enjoyment is proposed as an independent variable collectively with perceived usefulness and perceived ease of use, to measure the resultant impact on user acceptance. Enjoyment is classified as a type of intrinsic motivation and is aligned with hedonic information systems, where perceived usefulness of a system is associated with extrinsic motivation and utilitarian systems (Van der Heijden, 2004; Davis *et al.*, 1992). Enjoyment refers to the extent to which the activity of using a computer system is perceived to be personally enjoyable in its own right aside from the instrumental value of the technology (Van der Heijden, 2004; Davis *et al.*, 1992). These adapted theories of IS acceptance and continuance help to measure user intentions but do not address the impact of the technological features and task characteristics on user activity.

adoption of a variety of features to support different forms of interaction (Kane and Fichman, 2009; Orlikowski and Iaconno, 2001).

Adaptive structuration theory (AST) is one such theory that addresses complex systems and a user's interaction with it. AST seeks to understand the interplay between the deep structures that exist within both the technological artifact and its surrounding environment (DeSanctis and Poole, 1994; Giddens, 1979). AST is used to address the mutual influence of technology and social processes in order to examine human computer interactions (Jones and Karsten, 2003). AST is highly relevant to this study, as SNS are interaction-based social systems, which involve both continuous interactions with the system as well as the other users of the system.

However, AST concentrates on an organisational group's decision-making, focusing on the outcomes of interaction and changes in user behaviour and beliefs (DeSanctis and Poole, 1994). Conversely, this study seeks to understand social network site users, and how they use these systems to consume cultural goods. The focus is less on the outcomes of the interaction and more on how users are utilising these technologies for consumption practices, and thus, the perceptions of users about what they can achieve with the system. AST is very useful for understanding the process by which groups or organisations establish rules, utilise resources, achieve goals, and adapt over time. While useful for social media studies in general (particularly social collaboration tools like wikis), it is not appropriate in the context of this research.

A theory that does address the research context however, is task-technology fit (TTF). By accounting for task, technology, and the fit between the actions of the user and the capabilities of the technology, researchers gain a better understanding of the use of a technology for a specific purpose (Goodhue and Thompson, 1995). The relationship of communication to task-technology fit is a natural one, insofar that fit is useful for examining communication in different environments (Germonprez and Zigurs, 2009). As social network sites are based on social interaction and communication, it is appropriate to apply this theory to understand the fit between these systems for cultural good consumption.

However, the measurements used in task-technology fit theory are based on organisational and utilitarian benefits (Goodhue and Thompson, 1995), not relevant

to hedonic systems that users engage with in an experiential exploratory way (*cf.* Van der Heijden, 2004). It is difficult therefore to study user behaviours employing only utilitarian-focused theories – in terms of organisations and employee performance benefits. In particular, the measures of task-technology fit listed here are not appropriate for hedonic system use and behaviour (Goodhue and Thompson, 1995): (1) data quality; (2) locatability of data; (3) authorization to access data; (4) data compatibility (between systems); (5) training and ease of use; (6) production timeliness (IS meeting scheduled operations); (7) systems reliability; and (8) IS relationship with users. Thus, it is necessary to develop new measures and alter the constructs of the TTF model so that future studies can test the fit between social network sites and cultural good consumption.

Finally, the theory of affordances, which refers to the formation of perceptions about what a system can do, is proposed to address the insufficiencies of competing theories of IS use (Markus and Silver, 2008). It presents a view that precedes task-technology fit, when perceptions about fit are formed. An affordance is "the design aspect of an object which suggests how the object should be used" (McGrenere and Ho, 2000, p. 1). Affordances account not just for the properties of an artifact, but the interaction between users and artifacts as relevant properties of the artifacts (Markus and Silver, 2008). Affordances provide a theory for understanding the relationship between a technical artifact and a specific user, taking into account a user's experience and intentions when interacting with the system. By applying affordances we can better understand how users view social network sites for the consumption of cultural goods, and how they perceive SNS in the context of this phenomenon. Thus, affordances are defined in the following section, before outlining the procedure for applying this theoretical lens to the research topic.

2.5.3 Defining Affordances

The term affordance was originally defined by Gibson (1979; 1977) from ecological psychology. Gibson's affordances are considered an action possibility and exist independently of perception. However, Norman (2002; 1988) suggests that affordances are a combination of perceived and actual properties of an object. Affordances in this perspective provide strong clues about functionality and offer a variety of capabilities (Davern, 2007; Torenvliet, 2003; Norman, 2002). The intentions of system designers and the way that they encourage use of a system will

impact the nature of the system and the perceptions of the system user. For example, the objective of utilitarian systems is to increase the user's task performance while encouraging efficiency, while the dominant design objective of hedonic systems is to encourage prolonged use (Van der Heijden, 2004).

The literature has created a debate concerning the definition of affordances. Some posit that an affordance is not dependent upon correct interpretations or perceptions by a user (Gaver, 1991), they are properties of the world that facilitate actions and can exist independently (McGrenere and Ho, 2000; Gaver, 1991). While, in contrast, exists the view that affordances only concern the perceptions of a user – independent of the actual environment (Cooper *et al.*, 1995). This definition is in the realm of interface design where perception is considered the fundamental link between function and action (Torenvliet, 2003). These contrasting points of view stem from the original arguments by Gibson (1979) and Norman (1988), where actual and perceived affordances are in disparity.

In order to address these disparities different types of affordances are defined with the viewpoint of affordances existing independently of perception, but also acknowledging the influence of an individual's culture, social setting, experience and intentions (Gaver, 1991):

- **Perceptible affordances**: perceptual information is available for an existing affordance
- **Apparent affordances**: perception of an artifact match its intended use
- **Hidden affordances**: no information is available for an existing affordance
- **False affordances**: information suggests a non-existent affordance
- **Sequential affordances**: perceptible affordance actions lead to information indicating new affordances
- **Nested affordances**: affordances that are grouped in space and lead to sequential affordances
- **Sensory affordances**: perceptions based on modalities and media; including tactile, visual, and sound perceptions

Emergent affordances are also relevant when considering social media technologies. Users may perceive an affordance and use a system in such a way that was not purposefully designed, this type of affordance is emergent (Montesano *et al.*, 2007;

Gaver, 1991). These affordances result in the emergent use of a system whereby people use "the technology to perform tasks that were not previously acknowledged as being amenable to technology support" (Agarwal, 2000, p. 91).

This notion of distinct affordances is reiterated by others who note the importance of their role in relation to nested software affordances (*cf.* McGrenere and Ho, 2000). For example, affordances occur in a hierarchy that does not necessarily map onto system functions (McGrenere and Ho, 2000, p. 7):

> *Taking a standard GUI-based word processor as an example, we can say that it affords document editing. Editing includes affordances for text addition and deletion, margin adjustment, font selection, and many others.*

Moreover, affordances for software are the functions effectuated by the user (McGrenere and Ho, 2000). These functions "may include text-editing, searching, or drawing. The information that specifies these functions may be graphical (buttons, menus) or may not exist at all" (McGrenere and Ho, 2000, p. 6).

Necessary steps have been taken within the IS discipline to understand and apply the concept of affordances in the context of IS research. In this regard, three concepts are proposed in the study of IT artifacts, drawn from both the AST and affordances literature: (1) Technical Objects, (2) Functional Affordances, and (3) Symbolic Expressions. Table 2-7 displays an overview of these concepts and their characteristics.

IT ARTIFACT CONCEPTS		
Concept	**Description**	**Characteristics**
Technical Objects	IT artifacts and their component parts	– Structural or functional features – Interface and outputs – Real things with properties
Functional Affordances	A relation between a technical object and a defined user group	– Potential uses – Relationships/Perceptions – Points to action beliefs based on user characteristics – Enables the possibilities for goal-oriented action
Symbolic Expressions	The communicative possibilities of a technical object for a specified user group	– Intended messages to user – Unintended messages to user – May relate to the artifact as a whole or to any of its component technical objects

Table 2-7: IT Artifact Concepts (Source: Markus and Silver, 2008)

Technical objects denote IT artifacts and their component parts, they are real things and have properties (Markus and Silver, 2008). Technical objects also include the interface for user-artifact interactions (such as pointing devices, icons, and menu labels) and the outcomes of information systems (such as documents, drawings, transcripts, and representations) (Markus and Silver, 2008). However, "just because technical objects may be necessary for certain uses does not mean that this is how people will necessarily use them. Causal potential does not equate with deterministic outcomes" (Markus and Silver, 2008, p. 621). Echoing the original definition of affordances according to Gibson (1979) and Gaver (1991), technical objects do not need to be perceived by humans in order to exist, "they must generally be perceived to be used. Thus, the concepts of technical objects are different from the concepts of users' perceptions" (Markus and Silver, 2008, p. 621).

Functional affordances address the other view of affordance and "are a type of relationship between a technical object and a specified user (or user group) that identifies what the user may be able to do with the object, given the user's capabilities and goals" (Markus and Silver, 2008, p. 622). Functional affordances are therefore "the possibilities for goal-oriented action afforded to specified user groups by technical objects" (Markus and Silver, 2008, p. 622), and specifically refer to the *potential uses* of an IT artifact (Markus and Silver, 2008). By employing functional affordances in this study it supports a focus on particular technical objects (features of social network systems) and the properties relevant to the study of a specific user group's characteristics and goals (music consumers and music consumption) (Markus and Silver, 2008).

Symbolic expressions are proposed to address an 'impressions' gap between the technical objects, users' interpretations of them, and the appropriations of the technology (Markus and Silver, 2008). Where functional affordances are a "relational concept bridging IT artifacts and what users may do with them, [the authors] propose the concept of symbolic expressions as a relational concept bridging IT artifacts and how users may interpret them" (Markus and Silver, 2008, p. 622-623). Symbolic expressions are the *communicative possibilities* of a technical object – where functional affordances are the *potential uses* (Markus and Silver, 2008). Therefore the system and its design is a message to users "about how users must interact with the system in order to achieve a certain range of goals and

experiences" (Markus and Silver, 2008, p. 623). These expressions "refer to the underlying value-laden intent of a technical object that will guide use for a specific user group" (Grange and Benbasat, 2010, p. 4).

These concepts together encompass the relationship between a specified user or user group and the technical objects of a system (see Figure 2-6). Implementing this framework helps to measure IT effects from a social or behavioural standpoint (Markus and Silver, 2008).

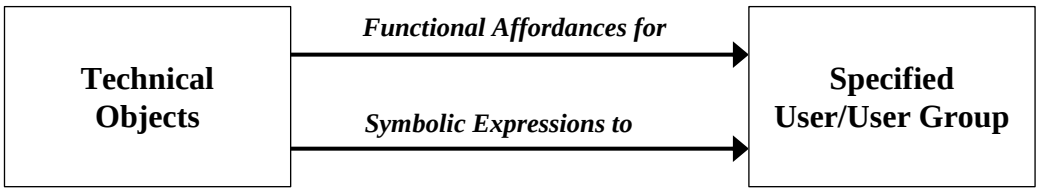


Figure 2-6: Artifact-User Relationship adapted from Markus and Silver (2008)

This framework enables research to compare across system types (versus two versions of the same system, as in AST) facilitating the examination of optional features (where they vary in system types) as well as the core features of an artifact (Markus and Silver, 2008). This study examines social network sites, where social networking functionality has been added to a number of social media technologies, with different intended purposes and a variety of features. Some SNS may have features focused mainly on media sharing capabilities; while in others social interactions may be predominant. Therefore, it is appropriate to compare IT use and effects across systems types and take into account both core and optional features of a system. Given this discussion, this research defines affordances as:

> *the perceptions of a user regarding the capability of a technical artifact for undertaking a task, and therefore the relationship between task, technology, and user characteristics in mediating user action.*

This definition of affordances – based on the relational concepts of task, technology and user characteristics – is used in the application of affordances to the research context, described in the following section.

2.5.4 Applying Affordances

Affordances enable us to understand how a specific user perceives an artifact for a particular task. Users perceive capabilities of the system based on what goal's they want to achieve. This bridges the gap between just understanding social network

sites and understanding social network sites in the context of consuming cultural goods. By framing it this way, the socially constructed beliefs of users and the social network site's capabilities are bounded in the context of a particular user group for a particular task, *i.e.* consuming cultural goods.

Tasks in this study are described as the actions carried out by individuals in turning inputs into outputs, while technologies are the tools used by individuals in carrying out their tasks (Goodhue and Thompson, 1995). A user undertakes a task to achieve a goal or an end, known as products, where required acts and information cues are the means for achieving these ends (Davern, 2007). The tasks in this study are: search, explore, discover, sample, interact, and share categorised into three activities: information seeking, information encountering, and information sharing.

It is also necessary to document the technical objects of an SNS, including technical features and functionalities. The IT artifact has been designed with an intended purpose, which can be adopted by a user or not and is evident through the choice of features implemented by users (Al-Natour and Benbasat, 2009; Markus and Silver, 2008; DeSanctis and Poole, 1994). "The more restrictive the technology, the more limited is the set of possible actions the user can take; the less restrictive the technology, the more open is the set of possible actions for applying the structural features" (DeSanctis and Poole, 1994, p126). Therefore, the technologies under investigation are social network sites with their diverse range of available features and functionalities.

In addition to identifying and investigating SNS and it features, it is equally important to identify a specific relevant group of users, as emphasised by Markus and Silver (2008, p. 628):

> *By conceptualizing these as relations, [the authors] are effectively arguing that no matter how nifty the features of an IT artifact are, they are irrelevant if the focus of a study is on a user group that is unable to perceive or take advantage of those features. Put differently, every research hypothesis about a functional affordance or a symbolic expression must be warranted, not only by specifying the technical objects that may contribute to the affordance or expression, but also by specifying the user or user groups for which those objects are affordances or expressions.*

Thus, it is crucial to identify the user groups for which affordances are analysed, along with a set of tasks motivating their interaction with the artifact, as task and user characteristics will affect how a person chooses to utilise the system and which features are relevant to their purpose (*cf.* Grange and Benbasat, 2010; Al-Natour and Benbasat, 2009; Orlikowski and Iacono, 2001; Orlikowski, 1996).

In the application of affordances, this research will investigate actual interactions of a user with SNS. The study of actual interactions is a result of the differentiation between the cognitivist view (*cf.* Gaver, 1991; Norman, 1988) and the interaction-centred view of affordances (*cf.* Vyas *et al.*, 2008; Bærentsen and Trettvik, 2002). The interaction-centred view emphasises that affordances of a system emerge during a user's actual interaction with it (Vyas *et al.*, 2008). Affordances in this view are "the possibilities for, both, thinking and doing, which are signified by its users during their actual interaction with the artifact" (Vyas *et al.*, 2008, p. 4). It also aligns with the cognitivist view of 'sequential affordances', where a user's action on affordances leads to new affordances, highlighting the evolving nature of affordances based on interaction, experience, and learning (Gaver, 1991). As illustrated, the way users choose to use a technology is not automatically determined by the technology design, but depends on the perceptions of the individual as well (DeSanctis and Poole, 1994). Thus, actual interaction will represent users' choices of an IT artifact's features to conduct a specific activity based on perceived affordances (Al-Natour and Benbasat, 2009; Davern, 2007; Orlikowski, 1996).

The following section analyses the literature to synthesise SNS affordances. However, there is no research on the affordances of SNS for the consumption of cultural goods. The affordances outlined in the following sections are based on generic SNS users, generic tasks, and generic SNS technologies. These are not 'affordances' as per the definition in this study, as they do not describe the relationship between a technical artifact and a user in the context of a particular task. They do, however, provide a benchmark for the level of understanding in the literature and as a result are a solid starting point for the exploration of the use of SNS for the consumption of cultural goods.

2.6 Literature Analysis of SNS Affordances

Social media in general and SNS in particular, can be differentiated from other web-based services and applications by the presence of a number of unique capabilities. In analysing the literature on social network sites, it was evident that no study explicitly focused on SNS affordances for music consumption. Nonetheless, there was a sizeable amount of literature around generic SNS affordances, which was synthesised and classified. However, it should be noted that not all of the affordances from the literature ascribe to the definition of affordances outlined in Section 2.5.3. In some cases the term affordance was used to denote the functionality or capability of a social network site. However, for the purposes of priming this research, six generic SNS 'affordances' are detailed here to inform the research strategy for data collection and analysis. The affordances are divided into social and content affordances. The social affordances involve the individual and their network, and concern the social acts that are made possible by the system. The content affordances are facilitated through the existence of the social affordances and concern the access and management of information and content within the social network environment.

2.6.1 Social Affordances

Social affordances consist of three types of affordances: profile building, social connectivity, and social interactivity. Social affordances are precursors to the content affordances. These affordances facilitate users to build a profile, and connect and interact with other users in the social network site.

2.6.1.1 Profile Building

Social network sites typically have a profile page and a homepage. Through these spaces the user is enabled to access the majority of the sites functionality, giving users the ability to manage their experience. Profile building affords users of an SNS to manage their unique profile and organise their personal information; this profile (re)presents their public identity (Acquisti and Gross, 2006). Individuals manage social presence (Kietzmann *et al.*, 2011) via this visible public or private space (boyd and Ellison, 2007). Social presence facilitates the accessibility of a user and their connections (Kietzmann *et al.*, 2011). A profile will usually consist of descriptors such as name, age, gender, location, interests, a list of friends, and a personal information section (Kietzmann *et al.*, 2011; boyd and Ellison, 2007), it may also

include the ability to display a profile photo, add multimedia content, modify the profile's look and feel, and add modules (applications) that enhance the profile (boyd and Ellison, 2007). Interests on the profile page may include: movies, books, television shows, and music (Liu, 2007). The function to use applications/features and embed them within the network facilitates users to alter their profile based on their own personal tastes and allows users to embed other social media tools within the network. Examples of applications include: gaming applications, music applications, photo applications, education applications, video applications, *etc.*

The profile enables an individual's self-presentation and self-disclosure, emphasising tastes, and influencing the surrounding network (Chu et *al.*, 2013). SNS affords social exposure to its users enhancing self-image through the disclosure of information and is thus an important aspect of these platforms. Active users present more information and contribute more content to the network, exacting more social influence as a result (Ong *et al.*, 2011). "People construct identity from a wide array of interdependent social resources. Ethnic background, nationality, gender, friends, workplace, education, hobbies, and possessions all shape our identity and convey a sense of who we are" (Lamb and Davidson, 2002, p. 2). Self-disclosure plays an important role in this identity construction and how users manage their profile. Users build their identity based on what information they share with the surrounding network. By disclosing personal information through a profile page, a user builds an image of themselves (Kaplan and Haenlein, 2010), this enables users to control identity perceptions (Lamb and Davidson, 2002) and to enhance their reputation and social status in the system (Moore and Benbasat, 1991). These identities influence the development and maintenance of interpersonal relationships (Velasco-Martin, 2011), thus impacting on a user's connectivity and interactions. Relationships between individuals in a network result in the co-construction of identity by 'interactors' and reciprocity influences this identity creation (Velasco-Martin, 2011; Lamb and Davidson, 2002).

Privacy is an on-going issue with regards to self-presentation and self-disclosure on SNS sites. The literature states that though users are willing to share their identities on these websites it does not mean they do not care what happens to their information (Kietzmann *et al.*, 2011). In online environments people regularly present different parts of their identity to different audiences (Lamb and Davidson,

2002) resulting in users creating 'identity strategies' whereby they have a real identity versus a virtual identity (Kietzmann *et al.*, 2011). These identities are created based on a user's motivation, whether it is self-promotion (*e.g.*, Facebook) or self-branding (*e.g.*, LinkedIn) (Kietzmann *et al.*, 2011). People will identify with and assume a role in a social network site; profile building helps to create these roles for users based on the image they want to present to the community (Hsu and Lin, 2008). A user will have expectations about who the audience will be and what their reactions will be and this will influence their self-presentation (Lamb and Davidson, 2002). Therefore, the functionality of a user's profile page in a SNS will influence what type of interactions a user undertakes and what type of image a user displays.

The profile is the central function of a social network system and is the focal point for each user. Profile building is used by an individual to present themselves to others and to create a personal online space. These personal spaces enable visibility of user actions and provide point-to-point communication for users (boyd and Ellison, 2007).

2.6.1.2 Social Connectivity

Social connectivity in an SNS provides the users with the ability to link with other individuals in a system through both commonly held information and social contacts. In these systems individuals are placed at the centre of their own community with a visible list of connections and a profile page displaying personal information (boyd and Ellison, 2007; Acquisti and Gross, 2006). As SNS provide users with the ability to connect through resources, so social connectivity also involves 'resource connectivity' which creates links between content and users (Marlow *et al.*, 2006).

The capability to connect to other people is fundamental to the success of these systems and facilitates other SNS functionality. How SNS users are connected often determines the motivation for and the way in which information is exchanged (Kietzmann *et al.*, 2011). By connecting with others in a network it enables a user to present themselves to their network through their profile (Ellison *et al.*, 2007). Users can establish new connections or maintain existing connections and display these relationships. Social connectivity provides users with the ability to find possible connections and control these relationships (Trusov *et al.*, 2009; Ellison *et al.*, 2007).

Internet use has influenced an individual's friendship network size. Research has found that heavy Internet users have significantly more offline and online friends than non-users (Wang and Wellman, 2010). This move to online social relationship management has impacted on social connectivity. People are not more socially isolated and less connected than before as a result of Internet use, instead they are connected in a different way (Wang and Wellman, 2010). A transformation has occurred in how and why people are socially connected, which is reflected by their online persona (*i.e.* the profile they display and the interactions they conduct). Thus, connections in an SNS may be based on a number of different factors; whether work-related contexts, shared interests, a previous network, *etc.* (Ellison *et al.*, 2007). In these social networks, individuals, groups, or pages are known as nodes. These nodes are tied by one or more specific type of interdependency. Interdependency may include friendship, family, common interest, knowledge, relationship, financial exchange, beliefs, or common motivations (intentions).

Furthermore, these relationships will range from the known to the unknown. Some connections in an individual's social network may be from their offline social life. However, various online connections may be with people unknown to the individual that share a common interest, is part of a shared group, or possibly is a public figure, like an artist, musician or politician. These differing relationships may impact on how users interact and are therefore noteworthy, as they are often a clue to the underlying motivation that leads users to converse, share content, meet up, or just connect (Kietzmann *et al.*, 2011). Two types of networks have been distinguished in the literature: (1) f-networks and (2) v-networks (Beugelsdijk and Smulders, 2003). The f-networks consist of close friends and family, whereas v-networks consist of remote contacts which are external to family – within and outside the community one lives in (Beugelsdijk and Smulders, 2003). In social network systems links are formed through shared interests and topics as well, either as a part of an f-network or a v-network (Java *et al.*, 2007). These social networks enable the construction of communities within the network. A community in a network "can be vaguely defined as a group of nodes more densely connected to each other than to nodes outside the group" (Java *et al.*, 2007, p. 5). The use of groups and pages are used in social networks to form these communities, or alternatively consists of the interaction of a few key nodes within a personal network.

After building a profile, users are prompted to identify the people with whom they want to connect with (boyd and Ellison, 2007). Across many SNS different labels are applied to these connections whether friends, contacts, subscribers, followers, fans, *etc.* (boyd and Ellison, 2007). The relationship of the connection may vary according to the social network system and the following types are facilitated (boyd and Ellison, 2007; Marlow *et al.,* 2006):

- Reciprocal – two-way connection (bidirectional)
- Following – one-way connection (unidirectional – loosely coupled)

Two-way connections require a bidirectional connection, where both users have access to the shared network and must confirm the connection (Kietzmann *et al.,* 2011; boyd and Ellison, 2007). One-way connections are unidirectional and enable users to be loosely coupled in a social network. A user may 'follow' another person but it does not have to be reciprocated (Naaman *et al.*, 2010). Connections may also be direct or indirect. Direct connections are two nodes linked to each other. Indirect connections are ties between one node and another node's network, known as 'friend of a friend' (indirect connections through a friend). Content and information can be accessed through these nodes, depending on the social network and the user's privacy settings. Some social network systems show these indirect connections and display how many degrees of separation exist (Kietzmann *et al.*, 2011).

2.6.1.3 Social Interactivity

Social interactivity refers to the potential for users to communicate with social connections. Social interaction can also be defined as the participation in a social network (Beugelsdijk and Smulders, 2003). Within a network, communication consists of comments, posts, electronic mail, instant messaging, and rating. An SNS enables individuals to interact in a community through the use of their profiles (Acquisti and Gross, 2006). Human interaction is the basis for the links that are formed in social networks (Rybski *et al.,* 2009). These links are possible because of social connectivity and create further ties and connections between individuals in a shared network. Social interactivity is therefore a result of social connectivity, and is the communication between two or more individuals in a network.

Social interactivity involves the exchange of information between users and may result in content sharing. Interactions between users can be based on an existing

relationship, between two members, or is used to establish a new one (Rybski *et al.*, 2009). What is unique about social network sites is that interactions between members may not result in the formation of a relationship because of the nature of some the systems. In Twitter, for example, members do not need to be linked to each other to receive their communications. Twitter followers can pass any number of messages from across the entire network (by 'retweeting' messages), an example of resource connectivity (Marlow *et al.*, 2006), these users become linked through posts which may or may not result in future direct social connectivity. Communication can be synchronous or asynchronous and differs across the medium in which people interact. There is a vast array of ways for people to interact with each other, directly or indirectly in a social network system, summarised in Table 2-8.

SYNCHRONOUS	ASYNCHRONOUS	
– Instant messaging (chat/group chat) – Video conferencing (VoIP)	– On-site messaging system/direct messages – Posts/status updates – Comments	– Video messages – Rating (like/favourite) – Question surveys – Notes/blog entries

Table 2-8: Synchronous and Asynchronous Interactivity Features

These methods of interaction are either public or semi-public and posted messages may be open to the entire community (indirect) or restricted to a user's designated contacts (direct) (Naaman *et al.*, 2010). These direct and indirect interactions describe a post directed to a specific individual or group or the posts that reach the wider community (Huberman *et al.*, 2009). Some of the main intentions for interactivity include (Naaman *et al.*, 2010; Java *et al.*, 2007):

- Conversations between users
- Opinions/complaints/recommendations
- Comment/anecdote
- Statements and random thoughts
- Information/content sharing
- Self-promotion
- Questions
- Presence maintenance

Within social network environments, interactions require a management/organisation tool so that users can process the flow of information and activity from their

network. Social networks sites employ activity feeds for this function (Naaman *et al.*, 2010) directly related to the content aggregation affordance. Social presence in an SNS is facilitated by a user's profile and visibility of interactions, instigating the feeling of intimacy and immediacy for users, usually not available due to a lack of physical cues available (Kietzmann *et al.*, 2011). A high level of social presence is likely to make conversations more influential (Kietzmann *et al.*, 2011; Lamb and Davidson, 2002).

2.6.2 Content Affordances

Content affordances consist of three types of affordances: content discovery, content sharing, and content aggregation. Content affordances rely on the existence and use of social affordances and are a subset of these affordance and their capabilities. For example, content aggregation is enabled through social connectivity. By connecting individuals in a social network environment, content is automatically aggregated for the user. Thus, many of the features outlined in the social affordances section relate to the content affordances.

2.6.2.1 Content Discovery

Content discovery affords the ability to find and encounter content within the social network system. SNS users discover content because they have firstly built a profile and proceeded to form connections, resulting in the ability to interact and share content. Through these actions, users can discover content and continue the information propagation. The primary method of finding content in an SNS is to navigate through the network, browsing content that has been posted or recommended by other users; additionally users can undertake a keyword-based search for textual or tagged content (Mislove *et al.*, 2006). Social media has been recognised as a tool that enhances serendipitous encounters and increases a user's opportunity for chance discoveries (Piao and Whittle, 2011). This discovery is facilitated through different mechanisms in an SNS (Cha *et al.*, 2007; Mislove *et al.*, 2006):

- **Featuring**: some SNS like YouTube and Flickr provide a home page with 'spotlight' content or most popular content. They also have 'explore' or 'browse' facilities.
- **Search results**: users can search within the social network for key terms.

- **Links between content**: some SNS have linking between content and group certain content together, for example on YouTube a user can select to watch only 'comedy' videos or 'film and animation' videos.
- **External Links**: content can be reached from outside of the SNS, for example, "users can reach Flickr photos from external websites, blogs, emails, and other mechanisms" (Cha *et al.,* 2009, p. 727).
- **Social network**: finding content that is uploaded or shared by friends in a network. Word-of-mouth and social cascades play a role in the dissemination of information between users.
- **Recommendations**: based on browsing history; recommendations are made based on similar videos or other user activity.
- **Specific applications**: embedded applications that provide specific functionality. For example iLike is embedded in Facebook as a music application, whereby users can find and follow bands/artists they like providing them with updates and the ability to share tastes and recommendations with friends using the application.

Another mechanism whereby users add metadata or 'keywords' to the content (whether photos, bookmarks, videos, *etc.*) makes it more searchable within the community and on the web, enhancing the discoverability of the content (Golder and Huberman, 2006; Marlow *et al.*, 2006). This is known as tagging, which involves attaching descriptions to information or content (Dalsgaard, 2006). Tagging is an important function in an SNS so that resources are annotated, in order to store, collect, and retrieve them (Marlow *et al.*, 2006, p. 31). There are different categories of tags relevant to most social media technologies: identifying what (or who) it is about, identifying what it is, identifying who owns it, refining categories, identifying qualities' or characteristics, self-reference, and task organising (Golder and Huberman, 2006). Tag quality is an important factor for effective tagging; *i.e.* the more appropriate and whole the tag is, the easier it is to search and locate the content later. A major aspect of successful social media applications is due to the fact that the "sharing of content can be enhanced by personal connections, rather than primarily via search or other query techniques" (Hendler and Golbeck, 2008, p. 15). Hendler and Golbeck (2008, p. 15) exemplify this concept with YouTube:

Once a video has "made it," getting many thousands of views, it can become a popular node in the network of videos, which are linked by a number of metadata features (who they are by, what the main subject is, where the content originated, etc.). Search in YouTube is primarily enhanced by the social context, not by the "semantic content" of what is in the videos.

Thus, content discovery relies heavily on user activity in the first place, such as forming connections and tagging content (which can vary greatly in quality and relevancy), and secondly based on the ability of the search engine to locate and retrieve relevant content for a user (using social and semantic mechanisms).

2.6.2.2 Content Sharing

Content sharing refers to the potential for information dissemination along the social links in a social network. People contribute photographs, videos, links, information, opinions, reviews *etc.* (Kumar, 2009). Content sharing is supported by the social interactivity affordance. This affordance enables information propagation among connections in a social network (Cha *et al.*, 2009). These social exchanges are known as 'social cascades' (or word-of-mouth exchanges) and have the ability to reach different nodes in a social network spreading "content, ideas, or information widely and quickly" (Cha *et al.*, 2009, p. 721). Sharing is facilitated with known connections or open comments to the entire community. Users may discover content in the social network from these social cascades. The reasons why people share content or even what is shared may vary, but the following four types of interactions have been characterised in the context of social network sites (Java *et al.*, 2007):

- **Daily Chatter:** posts about daily routine or what people are currently doing.
- **Conversations:** users direct messages to each other to conduct conversations.
- **Sharing information/URLs:** many of the posts will contain a URL in them, pointing users to external sites, or posting pictures/videos/web links to their connections.
- **Reporting news:** another type of interaction includes the reporting of news or current events. Due to the nature of these systems, news can propagate far and wide in a short time, spreading news very quickly.

Content may be shared from external sources or is propagated from internal discoveries (*i.e.* resharing or reposting) (Cheng *et al.*, 2014). Tagging and collaborative tagging (folksonomies) have emerged as an important facet when sharing content. There are a number of potential motivations influencing tagging behaviour, which are not mutually exclusive (Marlow *et al.*, 2006):

- **Future retrieval:** to mark items for personal retrieval of either the individual resource or the resultant collection of clustered resources.
- **Contribution and sharing:** to add to conceptual clusters for the value of either known or unknown audiences.
- **Attract Attention:** to get people to look at one's own resource because they are common tags.
- **Play and Competition:** to produce tags based on an internal or external set of rules.
- **Self-Presentation:** to write a user's own identity into the system as a way of leaving their mark on a particular resource.
- **Opinion Expression:** to convey value judgments that they wish to share with others.

Social network platforms rely on user-generated content and the voluntary contributions of users to stay relevant (Kumar, 2009). By adding semantic data, a user's ability to find and retrieve pertinent content is enhanced further and enables users to share more meaningful and relevant content. It is through this combination of social networks and semantic networks where value lies (Hendler and Golbeck, 2008). The technologies can often be integrated with each other (*e.g.* Facebook, YouTube, Twitter, *etc.*) enhancing the linking of individuals and content. Therefore, content sharing and content discover are impacted by the social connections a user has as well as the type of content that is shared and the quality of tagging.

2.6.2.3 Content Aggregation

Content aggregation affords users to syndicate and aggregate content. Aggregation is described as the bringing together of multiple content sources into one interface or application (Dalsgaard, 2006). It involves collecting material from many sources and using it for personal needs (McLoughlin and Lee, 2007). In terms of social connectivity SNS users 'follow', 'friend', 'like' or 'subscribe' to other profile pages.

This act aggregates content from these pages into an activity feed for the user (Naaman *et al.,* 2010). The type of relationship varies and may be one-directional or reciprocal depending on the features of the platform. User contributions are extremely important in these environments and designers build features to encourage such activities (Burke *et al.,* 2009). A 'content feed' or 'activity feed' has become the customary way of aggregating user contributions and sharing them across a network of connections (Burke *et al.,* 2009). These feeds can be user built, customised for a particular topic, or are provided by the system based on connections or recommendations (*e.g.* Facebook newsfeed; Twitter timeline). Activity feeds are a central feature of a social network system and are typified by "three factors distinguishing them from other communication" (Naaman *et al.*, 2010, p. 1):

1. *The public (or personal-public) nature of the communication and conversation*
2. *The brevity of posted content*
3. *A highly connected social space, where most of the information consumption is enabled and driven by articulated online contact networks*

Content aggregation is the mechanism by which user interactions are organised within the social network system. Adding and removing social connections will influence the content that is accessed, which will impact future content discovery and content sharing.

In addition, some SNS personalise content based on activity or browsing history in addition to social connections. Personalisation involves the process of customising a site based on the needs of specific users by taking advantage of (Eirinaki and Vazirgiannis, 2003):

1. the knowledge acquired from the analysis of the user's navigational behaviour (usage data), and
2. other information collected, namely, structure, content and user profile data.

Types of personalisation can be described using four basic categories (Nasraoui, 2005): (1) memorisation, (2) customisation, (3) guidance or recommender systems, and (4) task performance support. Memorisation is the simplest and most widespread form of personalisation (Nasraoui, 2005). "User information such as name and browsing history is stored (*e.g.* using cookies), to be later used to recognize and greet

the returning user" (Nasraoui, 2005, p. 3). Customisation involves adapting the content and structure of a web page based on the needs of each individual user's preferences (Nasraoui, 2005; Perkowitz and Etzioni, 2000). This allows for the creation of personalised home pages for each user and helps to improve the site's structure based on user interactions (Perkowitz and Etzioni, 2000). The use of recommender systems can be categorised in three ways based on how recommendations are made (Adomavicius and Tuzhilin, 2005, p. 735):

- *Content-based recommendations:* the user will be recommended items similar to the ones the user preferred in the past.
- *Collaborative recommendations:* the user will be recommended items that people with similar tastes and preferences liked in the past.
- *Hybrid approaches:* these methods combine collaborative and content-based methods.

Finally, task performance support involves client-side personalisation systems, where actions are executed on behalf of the user in order to facilitate access to relevant information (Nasraoui, 2005). Many of the technologies include: databases, cookies, dynamic page generation, esoteric pattern matching, machine-learning algorithms, rule-based inferencing, and data mining (Kramer *et al.*, 2000).

2.7 Chapter Conclusion

Social network sites (SNS) are becoming increasingly important, both for individuals and organisations. These systems have affected social and cultural activities, work practices, and in particular the ways in which we discover, share and consume cultural goods. Research in extant literature around the consumption of goods online, often sways toward utilitarian shoppers even though the two primary motivations for retail shopping (intrinsic/extrinsic) also apply to the online environment (Grange and Benbasat, 2010). Utilitarian shoppers are considered more profitable spending targets and have thus been the focus in IS literature, leaving a dearth of knowledge about hedonic system use (Grange and Benbasat, 2010). When both the product and the system are considered hedonic, like in the case of this study, it would be an oversight not to take into account all aspects of system and task. SNS are an influential medium for marketers, advertisers, and retailers because of their unique capabilities that enable word-of-mouth exchanges conveying recommendations,

opinions, and ratings. Furthermore, they enable users to take control of their own consumption, by enabling them to create an environment based on their own needs and preferences and to interact with like-minded individuals, essentially expanding the opportunities for discovering new and diverse content.

The functionality of SNS is emergent, shaped by user choices. Affordances are proposed in this study as a way to understand the interaction between a set of users and a technical artifact. Affordances describe the characteristics of an interactive system, which suggest how the system should be used. Based on a synthesis of the literature, six generic SNS affordances were delineated and categorised into social and content affordances. However, there is a clear gap in our understanding of the affordances of SNS for the consumption of cultural goods. To address this gap the research objective is to:

> *theorise the relationship between the consumption of cultural goods and user activity on social network sites through the lens of affordances.*

Thus, this research seeks to apply the concept of affordances to a specific group of users for a specific set of tasks, to understand the actual affordances of SNS for the consumption of cultural goods. The next chapter outlines the research strategy and proposes specific data collection and analysis methods. An examination of the technical artifact, user characteristics, and task characteristics in the study of affordances is required to address the research objective and research questions. Thus, each of these concepts is applied in the research design and the music consumption activities and generic SNS affordances outlined in this chapter are used to guide data collection and analysis.

CHAPTER 3
METHODOLOGY

3.1 Introduction

In order to understand the consumption of cultural goods using social network sites, a theory of affordances was proposed in Chapter 2. Affordances are defined as the perceptions of a user regarding the capability of a technical artifact for undertaking a task, and therefore the relationship between task, technology, and user characteristics in mediating user action. The affordances are proposed as a lens to achieve the study's research objective to:

> *theorise the relationship between the consumption of cultural goods and user activity on social network sites through the lens of affordances.*

Thus, the research questions in Table 3-1 seek to understand the technical artifact in more detail (RQ1), likewise the user and the tasks (RQ2), and thus the affordances of SNS for the consumption of cultural goods (RQ3). Each research question is aligned with the research method used to collect the data and the outcome from the study's findings (in Chapter 4 and Chapter 5). With the purpose of addressing the research objective and the research questions, a case study with two phases of data collection is proposed: (1) a system inventory and (2) interviews.

RESEARCH QUESTIONS		METHOD	OUTCOME
1	*What are the technical features of SNS?*	**Phase 1:** System Inventory	– System inventory of 18 technical features aligned with the generic SNS affordances
2	*What activities do users undertake when consuming cultural goods in SNS?*	**Phase 2:** Interviews	– Four active/passive user types – Three user activity process models
3	*What are the affordances of SNS for the consumption of cultural goods?*		– Seven affordances for the consumption of cultural goods using SNS – Theoretical research model with 14 propositions of affordance and activity relationships and dependencies

Table 3-1: Research Questions and Study Outcomes

The system inventory answers research question one: *what are the technical features of SNS?* The system inventory resulted in a comprehensive list of technical features for three social network site cases (Facebook, YouTube, and Twitter) based on

general SNS users. These features were then analysed using the generic SNS affordances (social and content) outlined in Chapter 2. The technical features and their descriptions are based on what the system is designed for and how the designer communicates this message to the user. Following this analysis, a comprehensive system inventory is provided for both the social and content affordances of the three case sites, this is then further abstracted to present an overview of the features, their functionalities and examples of their instantiations for general social network sites.

The interview data answered research questions two and three: *what activities do users undertake when consuming cultural goods in SNS?* and *what are the affordances of SNS for the consumption of cultural goods?* Two case sites were used in this phase: Facebook and Twitter. Within each case site 12 individuals were interviewed resulting in 24 interviews in total. Furthermore, within the two case sites (Facebook and Twitter) two types of groups were selected. The two groups of six individuals were sampled based on being a part of a: (1) general music group or a (2) musician-specific group. This allowed for within and cross case comparison of the data gathered. The interview guide was designed based on the consumption tasks and activities outlined in Chapter 2 (*i.e.* information seeking, information encountering, and information sharing). The interviews were analysed by applying the three concepts associated with the study of affordances: task, technology, and user. Firstly, users and user activities were analysed to answer research question two. The results of this analysis, in combination with the findings from phase one, enabled the researcher to address research question three and identify the affordances of SNS for the consumption of cultural goods. Thus, the interviews resulted in three user activity models for discovering and sharing content and seven affordances for the consumption of music using SNS.

The rest of the chapter is structured as follows. The research strategy is set forth in Section 3.2. It begins with a discussion of the philosophical position of the study in the context of the IS discipline (Section 3.2.1), which leads to an overview of the key elements of ontology, epistemology, methodology, and axiology. Critical realism is the ontological position of the study, which is compared with realism and relativism in Section 3.2.2. Three research paradigms are discussed in Section 3.2.3 and post-positivism is proposed as the research paradigm of choice based on the researcher's critical realist position and the objectives of the study. The methodology and

axiology associated with qualitative and quantitative studies are examined in Section 3.2.4. This section describes the exploratory nature of the study and justifies a qualitative methodology, namely case study research, to address the research questions. The axiological issues of case study research is summarised in advance of the research design, including an overview of the tactics employed in the implementation of the study to address reliability and construct validity. Section 3.2.5 consists of a synopsis of the research strategy, illustrating the choices made at the ontological, epistemological, methodological, and axiological level. Section 3.3 presents the design of the study. There are four stages in the research design with two phases of data collection and analysis. Each stage addresses the application of affordances to the research process. After outlining the research process, the case study environments are described in Section 3.3.1 in advance of presenting the data collection and analysis methods for both phases of the study respectively (Section 3.3.2 and 3.3.3).

3.2 Research Strategy

This section presents a discussion on the philosophy of science in the information systems (IS) discipline, outlining the various paradigms at the foundation of IS research. This leads to an examination of the ontological, epistemological, methodological, and axiological issues in IS research. Based on this discussion qualitative case study research is proposed, informed by the critical realist and a post-positivist position of the researcher and the suitability for addressing the research objective and questions.

3.2.1 Research Philosophy

Information systems are described as the effective design, delivery, use, and impact of information technology in organisations and society (Avison and Fitzgerald, 1995). The information systems discipline is considered a relatively new field, with researchers from various disparate areas; ranging from physics and chemistry to mathematics, psychology, and sociology (Gregor, 2005). Researchers from diverse fields bring "different views on the nature of theory, knowledge and epistemology" (Gregor, 2005, p. 3). As a result, there are contrasting viewpoints underpinning IS research to consider before determining the research methods best suited.

The information systems discipline is associated with a broad range of research approaches due to the variety of academic disciplines and communities contributing to it (Niehaves and Stahl, 2006). These approaches are identified as contrasting 'paradigms' (Niehaves and Stahl, 2006), which typically consist of assumptions about knowledge, how to acquire knowledge, and the physical and social world (Hirschhiem and Klein, 1989). The IS research community strives to examine what constitutes valid research in the discipline, with many advocating a move from positivism toward interpretivism, as well as a move toward alternative approaches (Hirschheim and Klein, 1992). Reason being, the opinion of academics with regard to IS research is divided between applying the methods of natural science, according to positivism – useful for explanation, prediction, and control (Lee, 1991) – to a belief that an interpretivist approach is far more relevant (Hirschheim and Klein, 1992).

Information systems are viewed as social systems (as opposed to technical systems) because they draw heavily from the social sciences (Hirschheim and Klein, 1992). This focus on the social aspects of IS research is further reinforced by Lee (1991):

> *The interpretive approach to organizational research maintains that the methods of natural science are inadequate to the study of social reality. This school of thought takes the position that people, and the physical and social artifacts that they create, are fundamentally different from the physical reality examined by natural science.*

However, there are various criticisms directed at the interpretivist methods used in IS research. Qualitative researchers have been characterised as 'journalists' and 'soft scientists', their work scrutinized as unscientific and only exploratory or subjective (Denzin and Lincoln, 2000). By aligning qualitative research with fiction and not science, positivists seek to diminish its verifiability by assuming "a stable, unchanging reality that can be studied using empirical methods of objective social science" (Denzin *et al.*, 2006, p. 771). However, qualitative research exists in a 'world of lived experiences' where "individual belief and action intersect with culture" (Denzin and Lincoln, 2000, p. 2).

Interpretivism is neither better nor worse than positivism it is merely different (Lee, 1994); with each paradigm possessing weaknesses that will affect the quality of the solution it inspires (Hirschheim and Klien, 1989). Accordingly, it is fundamental to understand the phenomenon from each perspective when making choices about the

methods and strategies to implement a study. This is achieved by exploring the belief system held, before addressing what the research is asking in order to assess the best method with regard to these perspectives (Hirschheim and Klien, 1989). These levels of understanding constitute the ontological, epistemological, methodological, and axiological positions that embody the distinction between 'hard' positivist and 'soft' interpretivist research paradigms (Fitzgerald and Howcroft, 1998a and 1998b). More specifically, the ontological level is based on ‘what is assumed to exist’ (Ilvari *et al.*, 1998), the epistemological level represents our theory of knowledge and how that knowledge is acquired (Guba and Lincoln, 1994), the methodological level answers how the researcher finds out what is to be known, and the axiological level concerns the principles regarding the value (rigour) of the study (Fitzgerald and Howcroft, 1998a).

From an ontological position we must ask ourselves “what is the form of nature and nature of reality and, therefore, what is there that can be known about it?” (Guba and Lincoln, 1994, p. 108); it essentially relates to our view of the world (Hirschhiem and Klein, 1989). Within IS research, ontology involves the following phenomena (IIvari *et al.*, 1998):

- information and data,
- information systems,
- human beings in their different roles of IS development and IS use,
- technology, and
- human organisations and society at large.

In addition, the same ontology can lead to more than one epistemology (Lee, 2004). The epistemological question explores “what is the nature of the relationship between the knower or the would-be knower and what can be known?” (Guba and Lincoln, 1994, p. 108). Epistemological assumptions are viewed as our theory of knowledge and how that knowledge is acquired (IIvari *et al.*, 1998; Guba and Lincoln, 1994). In the IS discipline it is associated with “the way in which system developers acquire knowledge needed to design the system” (Hirschhiem *et al.*, 1995, p. 47). Thus, leading to the methodological question which reviews “how the inquirer (would-be knower) can go about finding out whatever he or she believes to be known?” (Guba and Lincoln, 1994, p. 108). Thus, for the purposes of this study,

the following sections outline the ontological and epistemological position of the researcher before justifying the methods in which to address the research objective and questions. The choices made at each level are framed in the research context.

3.2.2 Ontological Level: Critical Realism

There is a contrast between the external philosophical perspective or 'metaphysical realism' and the internal philosophical perspective (Field, 1982). According to Putnam (1981) metaphysical realism asserts that the world consists of some fixed totality of mind-independent objects and there is exactly one true and complete description of the way the world is. Mingers (2004a, p. 88) reiterates this, stating that a "realist understanding of science takes the view that certain types of entities – be they objects, forces, social structures, or ideas – exist in the world, largely independent of human beings; and that we can gain reliable knowledge of them". The position adopted by positivism is realism, "it postulates that the universe is comprised of objectively given, immutable objects and structures…[that] exist as empirical entities, on their own, independent of the observer's appreciation of them" (Hirschheim, 1985, p. 3). Hirschheim (1985, p. 3) also notes that this position contrasts sharply with the relativist position:

> *[Relativism] holds that reality is a subjective construction of the mind. Socially transmitted concepts and names direct how reality is perceived and structured; reality therefore varies with different languages and cultures. What is subjectively experienced as an objective reality exists only in the observer's mind.*

Mingers (2004b) proposes critical realism as a 'sound underpinning' for information systems to address the gap between these two perspectives. The original aims of critical realism were to (Mingers, 2004a, p. 91):

1. re-establish a realist view of being in the ontological domain whilst accepting the relativism of knowledge as socially and historically conditioned in the epistemological domain, and
2. argue for a critical naturalism in social science.

The primary ontological claim of critical realism is to recognise the "existence of a domain of causally efficacious mechanisms and structures that have powers or properties which are, in varying degrees, independent of our experience and knowledge of them" termed the domain of the Real (Mingers, 2004b, p. 150).

Further to this is the interaction of these structures which "give rise to events that occur or do not occur (the Actual) and a small subset of these are experienced and observed by humans (the Empirical)" (Mingers, 2004b, p. 150). In order to understand better what Mingers has described, Figure 3-1 displays the relationship between the three domains of real.

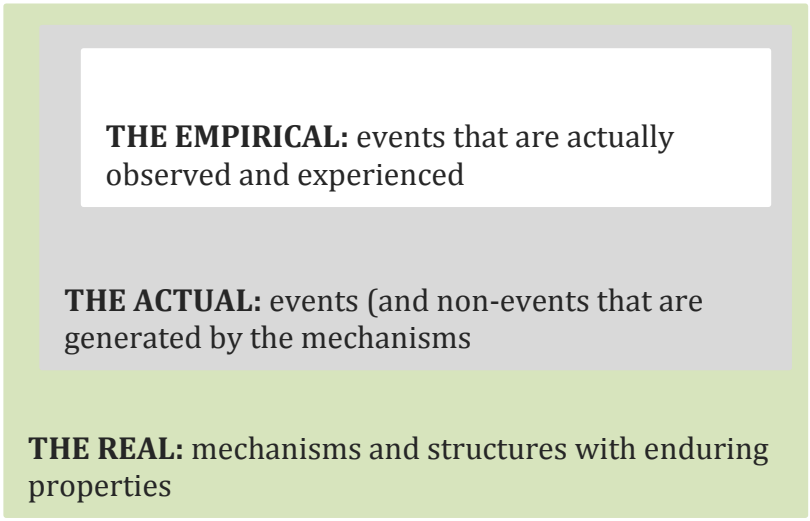


Figure 3-1: The Three Domains of Real adapted from Mingers (2004a)

Thus, critical realism is identified as the ontological philosophy underpinning this research, and given this perspective post-positivism is logically proposed as the epistemological paradigm of choice. The following section compares the competing philosophical paradigms, before addressing the methodological choices appropriate in the study of the research phenomenon.

3.2.3 Epistemological Level: Post-Positivism

The critical realist stance described in the previous section is naturally aligned to a post-positivism perspective. In the context of the ontological position, post-positivism moves from a 'naïve' realist posture to the critical realist perspective by accepting that 'real' reality exists only imperfectly which is only probabilistically apprehendable (Guba and Lincoln, 1994; Guba, 1990). Post-positivism emphasises the study of the social world from the point of view of the individuals who are directly involved, highlighting the importance of occupying the frame of reference of the participant in action (IIvari *et al.*, 1998; Burrell and Morgan, 1979). Consequently, post-positivists reject the standpoint of the observer, characterised by positivist epistemology, suggesting it is an invalid vantage point for understanding

human activities (IIvari *et al.*, 1998). This view aligns with the theoretical lens of affordances for addressing the research objective and questions. The theory of affordances asserts that it is not just the structure and features of a system that governs a systems capabilities and the way that users interact with it (*cf.* Markus and Silver, 2008). It emphasises the importance of the user and user characteristics in determining user perceptions of a technical artifact for a specific set of tasks.

The basic beliefs of the alternative paradigms in IS research are outlined in Table 3-2, including: positivism, post-positivism, and interpretivism. The table includes a summary of the ontological, epistemological and methodological perspectives of each according to Guba and Lincoln (1994, p. 109).

BASIC BELIEFS OF ALTERNATIVE INQUIRY PARADIGMS			
Item	**Positivism**	**Post-positivism**	**Interpretivism**
Ontology	Naïve realism – "real" reality but apprehendable	Critical realism – "real" reality but only imperfectly and probabilistically apprehendable	Relativism – local and specific constructed realities
Epistemology	Dualist/objectivist; findings true	Modified dualist/ objectivist; critical tradition/community; findings probably true	Transactional/ subjectivist; created findings
Methodology	Experimental/ manipulative; verification of hypotheses; chiefly quantitative methods	Modified experimental/ manipulative; critical multiplism; falsification of hypotheses; may include qualitative methods	Hermeneutical/ dialectical

Table 3-2: Beliefs of Alternative Paradigms amended from Guba and Lincoln (1994)

The two paradigms that generally receive the most amount of attention are positivism and interpretivism, as they are accepted as the most relevant paradigms (Niehaves and Stahl, 2006). The positivist approach is viewed as objective whilst, in contrast, the interpretive approach is viewed as subjective. To reiterate, the essence of the objectivist position is to apply models and methods derived from the natural sciences to the study of people and social structures, by treating the social world as if it were the natural world (Hirschhiem and Klein, 1989; Burrell and Morgan, 1979). In comparison, the subjectivist approach deems the methods of the natural sciences inappropriate for studying the social world (Hirschhiem *et al.*, 1995).

Within the research community the consensus is that research is one or the other, but never both. Thus, positivism and interpretivism are viewed as opposing paradigms. It

is assumed that because the paradigms answer different core questions they subsequently provide different perspective on IS research (Niehaves and Stahl, 2006). Nevertheless, these "perspectives are not exclusive but complementary" (Niehaves and Stahl, 2006, p. 8). Thus, firstly an examination of positivism and post-positivism is conducted, before outlining and comparing interpretivism, to understand the principal paradigmatic differences and explore the application in this research study.

Positivism assumes that reality is objectively given and can be described by measurable properties independent of the observer (Mingers *et al.*, 2013; Walsham, 1993). Positivism seeks to explain and predict what happens in the social world by searching for regularities consisting of causal relationships between the constituent elements (Walsham, 1993; Burrell and Morgan, 1979). There are six 'key ideas' aligned with a positivist approach to natural science (O'Hear, 1989). These six key ideas were identified by Hacking (1983) and reiterated by O'Hear (1989) (see Table 3-3).

SIX KEY IDEAS OF A POSITIVIST APPROACH		
	Key Ideas	**Description**
1	*Emphasis on verification and/or falsification*	Theory should specify or predict observable actions and conflict with observable evidence
2	*Sensory observation founds all genuine knowledge*	Positivism cannot use or claim non-observational knowledge
3	*Philosophical scepticism regarding physical necessity*	Talk of causation ultimately results in talk of constant conjunctions between types of events
4	*Hostility to causes and suspicion of deep explanations*	When there is no physical necessity forcing events to happen – with regularities between types of event – explanation is done by postulating wider ranging regularities
5	*Hostility to unobservable or theoretical entities*	Observing what was previously unobservable should not result in scepticism – but in the acceptance of their real existence, based on the acceptance of certain controversial and highly theoretical theories
6	*Opposition to metaphysics*	Positivists will interpret the significance of metaphysics in heuristic terms – for explanation – useful in guiding empirical research

Table 3-3: Six Key Ideas of a Positivist Approach (Source: O'Hear, 1989)

It is widely regarded that there is an inadequacy of the original positivist understanding of science, knowledge, and meaning (Lee, 2004). With the traditional view of positivism, an understanding of the natural sciences is grossly oversimplified

(Lee, 2004). This negative view of positivism exists because of the persistence of social scientists in adhering to traditional positivism, regardless of technological innovations and changing perspectives (Lee, 2004). Karl Popper (1963) proposed anti-positivism in place of traditional positivism and formulated a "demarcation criterion for distinguishing science from non-science, where criterion pertains to what Popper called falsifiability" (Lee, 2004, p. 4). Where positivism embraces regularities, causal laws, and explanations for scientific knowledge; "anti-positivism emphasises human interpretation and understanding as constituents of scientific knowledge" (IIvari, 2000, p. 47). Post-positivist or anti-positivism is considered to be a modified dualist and objectivist assumption whereby it is possible to approximate, but never fully know reality (Denzin and Lincoln, 2000; Guba and Lincoln, 2000).

What's more, the imbalances that have emerged in the quest for realistic objective inquiry are addressed in order to make positivism, in its 'new post-positivist clothes', useful once again (Guba, 1990). The imbalances of postivism that Guba (1990) speaks of include:

1. The imbalance between rigour and relevance
2. The imbalance between precision and richness
3. The imbalance between elegance and applicability
4. The imbalance between discovery and verification

Like post-positivism, interpretivism is proposed to address the problems associated with positivism (Lee, 2004; Hirschheim and Klein, 1992). Interpretive methods are considered to be a social construction by human actors; it is the researcher's preconceptions that guide the process of enquiry and as a result both perceptions of the researcher and the human subject are altered due to the interaction (Baskerville, 1999; Walsham, 1993). The assumption is that no research can be considered completely objective, and interpretative studies use this knowledge to gain more understanding. Positivism claims to be the route to objective knowledge and while scientific theory can be objective, Lee (2004, p. 3) argues that an objective theory cannot exist "independently of human beings and their contaminating influences."

Researchers use an interpretive approach to understand and describe the context of an information system, including the process in which the IS influences and is

influenced by its context (Cecez-Kecmanovic, 2001; Walsham, 1993). Interpretive studies generally attempt "to understand phenomena through the meanings that people assign to them" (Avison and Myers, 2005, p. 243). The interpretive approach is associated with qualitative exploratory research, while positivist approaches are aligned with quantitative confirmatory studies (Wildemuth, 1993). This means that positivism is useful in discerning the statistical regularities of behaviour and interpretivism aims to understand the social world from the viewpoint of the actors within in it by applying meaning to observable behaviours (Wildemuth, 1993).

In contrast, post-positivism "is based on the assumption that the method to be applied in a particular study should be selected based on the research question being addressed" (Wildemuth, 1993, p. 450), whether this be an interpretivist or positivist approach. Therefore, addressing the research questions with the most appropriate methods is what is important. Hirschhiem (1985, p. 13) reiterates this idea with the term methodological pluralism, "the assertion that there is no one correct method of science but many methods…the 'correct' one is contingent on the problem to be studied, the 'kind' of knowledge desired".

It is thus concluded that the post-positivist perspective is the most appropriate approach for this research. By selecting methods that are relevant to the context of the phenomenon to be studied, this research implements a research strategy that will suitably address the research objective and research questions. Given the lack of research on the study's phenomenon of interest, including but not limited to social network sites, hedonic system use, experiential consumption behaviours, and the practical application of the theory of affordances, it is unrealistic to assume that objective measures can be quantitatively studied based on the existing state of knowledge for this research context. Therefore, an exploratory study using qualitative methods is proposed to address the research questions, with the aim to maintain rigour by assuming a post-positivist perspective. Thus, prior instrumentation and *a priori* theory are used to guide both data collection and analysis, more specifically, the generic SNS affordances and the identified music consumption tasks outlined in Chapter 2. Furthermore, the findings of an inquiry should come from as many sources as possible, whether data, investigators, theories, or methods, in order to reduce distorted interpretations in the study (Guba, 1990). Accordingly, critical multiplism has been applied in this study, by using multiple

stages in the research process and two phases of data collection, to achieve a comprehensive examination of the technical artifact, user characteristics, and task characteristics and appropriately apply the theory of affordances.

3.2.4 Methodological and Axiological Level: Case Study Research

Approaching the field from a post-positivist perspective, a range of research methods were available. However, given the research objective was to theorise the use of SNS for the consumption of cultural goods using affordances as a theoretical lens, the nature of the study is exploratory, thus implicating qualitative research methods. Based on the three research questions proposed, qualitative case study research was deemed most appropriate. The case study research consisted of two phases of data collection: a (1) system inventory and (2) interviews. To answer research question one (*what are the technical features of SNS?*) a system inventory examining the user guides and help documentation of three general social network sites (Facebook, YouTube, and Twitter) was implemented. To answer research question two and three (*what activities do users undertake when consuming cultural goods in SNS?* and *what are the affordances of SNS for the consumption of cultural goods?*) interviews with 24 SNS users and music consumers were conducted in two case sites (Facebook and Twitter). To begin with, this section details the rationale for qualitative case study research before summarising the tactics to ensure reliability and validity of the research constructs at the axiological level in the context of case study research.

3.2.4.1 Exploratory Qualitative Research

This study is an exploratory research study because of the lack of theory explaining how users consume cultural goods using social network sites and because of the scarcity of knowledge in each of the respective areas. An exploratory research project "is useful when the research questions are vague or when there is little theory available to guide the development of hypotheses" (Hair *et al.*, 2007, p. 154). It is also useful for understanding a research problem initially, so that scientific theory can be formulated later (Straub *et al.*, 2005). There are very few studies in IS research that theorise the use of hedonic information systems, especially theories that account for complex interactive social system like social network sites. In conjunction, there are very few empirical studies on hedonic experiential consumption behaviours, which are often overlooked in the consumer behaviour

literature in lieu of utilitarian consumption with its emphasis on related purchasing behaviours. Furthermore, only a broad overarching examination of SNS use is evident in the social media literature, often based on general SNS users and general system use. These studies are not useful to extrapolate specific user-artifact interactions (*cf.* Hargittai, 2007).

By contributing exploratory research to the area a better understanding of social media, and social network sites specifically, can be gained, providing future studies with empirical measures and a suitable theoretical grounding with which to examine user-artifact interactions in a variety of contexts (*cf.* Straub *et al.*, 2005). The application of the theory of affordances is also novel, and has yet to be applied in the context of specific IS research to the researcher's knowledge. Thus, the application of affordances in this context contributes to the practical issues of applying the theory of affordances in other studies and helps to alleviate some of the confusion surrounding the affordance definition. By applying the theory of affordances, the research seeks to include explanatory aspects as well as exploratory, while conjointly providing a balance between relevance and rigour (*cf.* Benbasat *et al.*, 1987; Yin, 1989).

An exploratory research design mainly uses qualitative methods to discover new relationships, patterns, and themes (Straub *et al.*, 2005; Hair *et al.*, 2007). Unlike confirmatory studies, it does not test or confirm a pre-specified relationship (Straub *et al.*, 2005). Furthermore, qualitative research methods are particularly appropriate for the study of social and cultural phenomena and are thus appropriate to address the research objective and questions (Avison and Myers, 2005). Qualitative research involves the use of a variety of empirical materials (Denzin and Lincoln, 2000), which provide sources of data rich in description and explanation (Miles and Huberman, 1994). Such empirical materials include case study; personal experience; introspection; life story; interview; artifacts; cultural texts and productions; and observational, historical, interactional, and visual texts (Denzin and Lincoln, 2000).

In contrast, quantitative data methods enable a researcher to check for specific behaviours without any descriptive data to explain occurrences (Creswell and Plano Clark, 2007) by using numbers to represent the characteristics of something (Hair *et al.*, 2007). Furthermore, even though quantitative research methods are useful for measuring causality and validating research findings to provide objective, replicable

sets of statistical methods (Straub *et al.*, 2005), they are inappropriate when constructs and measurements are non-existent and thus cannot be analysed using large sets of numeric data. Moreover, by applying numerical order to a problem, the context of a research phenomenon is disregarded and may be misleading, as numbers themselves have no intrinsic value (Remenyi, 2005). Qualitative methods have been employed in the IS field as a result of the different trends in research topics and because of varying philosophical perspectives (Dubé and Paré, 2001). Thus, quantitative (QNT) and qualitative (QLT) approaches are compared in Table 3-4 to evaluate their suitability in the context of this research study.

QUANTITATIVE APPROACH		**QUALITATIVE APPROACH**	
Purpose	**Suitability**	**Purpose**	**Suitability**
More useful for testing	No measures available to test; objective ratings must be developed for research area	*More useful for discovering*	Useful in this context to understand the technical artifact and user behaviour in more detail, as well as the interactions; allows for subjective interpretations
Provides summary information on many characteristics	Less concerned about representativeness in this research context; require exploratory analysis to provide measurable constructs to investigate numerous characteristics	*Provides in-depth (deeper understanding) information on a few characteristics*	Useful to understand the three user activities in the context of the generic SNS affordances to develop affordances specifically for the research context
Useful in tracking trends	Useful to track the trends in user behaviour; however require previous steps in order to sample a large population and obtain objective results	*Discover 'hidden' motivations and values*	Useful to understand what motivates users to interact with the SNS when consuming cultural goods and what behaviours are afforded and constrained

Table 3-4: Approach Suitability for Research Context (Source: Hair *et al.*, 2007)

Because of the nature of the research problem, the theoretical lens, and the degree of uncertainty in the research phenomenon, qualitative research methods have been deemed most appropriate for data collection and analysis (*cf.* Rowlands, 2005; Trauth, 2001). Consequently, case study research is proposed as a suitable qualitative research method in the following section.

3.2.4.2 Case Study Research

Case study research provides valuable insights into a research phenomenon (Benabasat *et al.*, 1987). It involves the collection of evidence from multiple sources in relation to a particular set of circumstances (Remenyi and Williams, 1995). The evidence in case study research may be a result of qualitative or quantitative methods provided by a number of sources including fieldwork, archival records, verbal reports, observations, or a combination (Yin, 1981). However, case studies typically involve an in-depth examination of an activity or event, known as a 'case' (Hair *et al.*, 2007). Actions taken by individuals in the case are described and the reactions, responses, and effects on other participants are compared in order to draw conclusions (Hair *et al.*, 2007).

The use of case studies is appropriate in this research context because research and theory is at an early formative stage and extant literature is insufficient to produce causal questions (*cf.* Dubé and Paré, 2001; Benbasat *et al.*, 1987; Yin, 1981). Additionally, case study research is useful for complex problems by providing an in-depth investigation within the environment in which the phenomenon occurs (Dubé and Paré, 2001; Marshall and Rossman, 1989; Yin, 1981). Case studies allow for the collection of complex and rich evidence (Remenyi and Williams, 1995) via a systematic process for collecting and analysing data and reporting the findings (Hair *et al.*, 2007). Other qualitative methods such as ethnography and action research have been discounted, even though they also examine phenomena in a natural setting and use similar data collection methods (Dubé and Paré, 2001). These methods have been compared with case study research in Table 3-5.

Firstly, ethnography differs to case studies in the amount of time researchers are required to spend in the field (Dubé and Paré, 2001). Researchers immerse themselves in the lives and people of the study. Though ethnography is appropriate, it is not necessary to use this method to answer the questions that this study seeks to answer, as less immersive methods are just as suitable for examining the research phenomenon. Additionally, ethnography may influence the perceptions of the researcher, which may affect the understanding of the 'perceived' affordances of a technology – best captured in the context of a specific user group for a specific task, which the researcher is not a part of. Likewise, action research is dismissed, as joint collaboration with research respondents is not required in order to address the

research objective. Furthermore, action research is most appropriate in the context of practical concerns by allowing the researcher to take part in the research context, while case studies are useful for understanding user behaviour and are therefore more suitable.

COMPARISON OF QUALITATIVE RESEARCH METHODS		
Method	**Description**	**Difference to Case Study**
Ethnography	– Significant amount of time in the field – Emersion into the lives of the people they study – Seek to place the phenomenon studied in their social and cultural context	– Less time spent in the field – Culture and routinised behaviours may or may not be at the heart of the observed phenomenon
Action Research	– Aims to contribute to the practical concerns of people in an immediate problematic situation – Aims to contribute to the goals of social science by joint collaboration within mutually acceptable ethical framework – Collaborative research method	– Role of the case researcher is of a detached observer – May not be an immediate problematic situation – Not a collaborative method

Table 3-5: Comparison of Qualitative Methods (Source: Dubé and Paré, 2001)

3.2.4.3 Reliability and Construct Validity

Four validity tests outlined by Yin (2003, p. 34) were applied to ensure rigorous validation of the qualitative case study research. The four tests are outlined in Table 3-6, which displays a description of each test and its purpose, before presenting the tactic used in this study to address it and at which stage of the research strategy it occurs (whether during research design, data collection, or data analysis). Two phases of data collection were used to support the research findings and further substantiate constructs (*cf.* Garton *et al.*, 1997; Eisenhardt, 1989; Benbasat *et al.*, 1987). Furthermore, multiple cases were investigated, in both phases, to provide a more in-depth understanding of the research phenomenon and to avoid the weaknesses of single-case research, which is often incapable of providing generalisable findings (*cf.* Dubé and Paré, 2003; Yin, 1994). Prior instrumentation was used in data collection and analysis to ensure construct validity and reliability; this included the consumption activities and generic SNS affordances outlined in Chapter 2. Data coding was undertaken and chains of evidence were developed as the data was analysed, which aided in within and cross-case analysis (*cf.* Yin, 2003).

CASE STUDY TACTICS FOR FOUR DESIGN TESTS			
Tests	**Purpose**	**Tactic Employed**	**Stage**
Construct Validity	Establishing correct operational measures for the concepts being studied	– Used prior instrumentation	→ Research Design
		– Used multiple sources of evidence: two phases of data collection with multiple case sites in each	→ Data collection
		– Established chain of evidence based on interview data	→ Data analysis
Internal Validity	Establishing a causal relationship as distinguished from spurious relationships	– Used data coding and pattern-matching across case sites – Undertook explanation-building to distinguish relationships between data	→ Data analysis
External Validity	Establishing the domain to which a study's findings can be generalised	– Used replication logic with a multiple-case study design	→ Research design
Reliability	Demonstrating that operations of a study such as the data collection procedures can be repeated with the same results	– Developed a case study protocol of research procedures (*e.g.* semi-structured interview guide based on literature analysis)	→ Research design
		– Documented details of data collection by developing a case study database consisting of digitally recorded interviews, transcripts, codes, memos, *etc.*	→ Data collection

Table 3-6: Case Study Tactics for Four Design Tests (Source: Yin, 2003)

3.2.5 Summary of Research Strategy

In order to understand the choices made in this study at the ontological, epistemological, methodological, and axiological level, Figure 3-2 displays each step in the research strategy and the choice made at each level. Following this summary, the research design is presented and the methods implemented to gather and analyse the evidence are outlined.

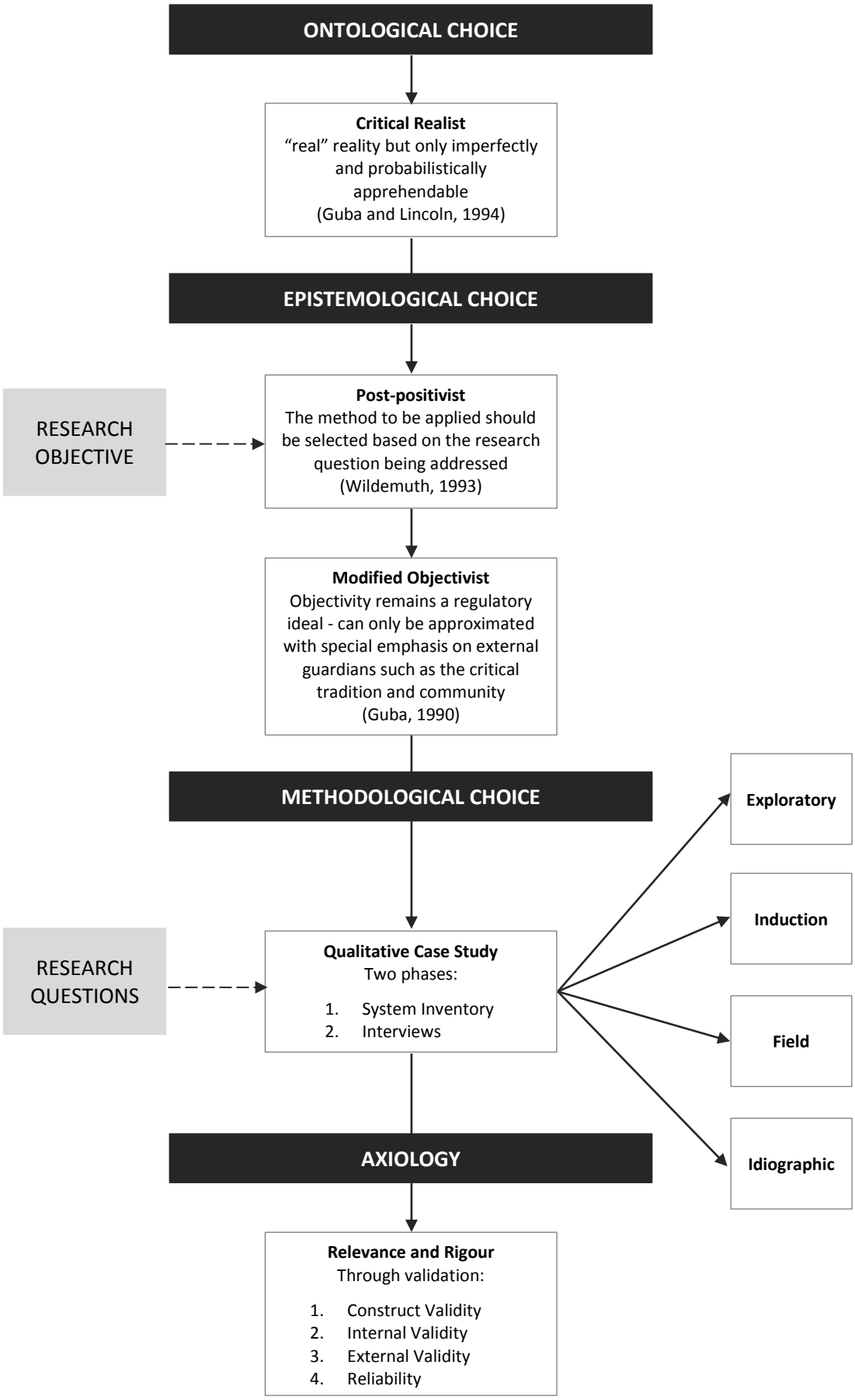


Figure 3-2: Research Strategy

3.3 Study Design

The case study design consisted of two phases of data collection: (1) a system inventory and (2) interviews. The system inventory examined the documentation of three general SNS and the interviews were conducted with 24 respondents (SNS music consumers) from two SNS case sites. These methods enabled the researcher to add value at each stage of the research process as displayed in Table 3-7. The early stages of the research process vary in the specificity of technology, user, and task. A low level of specificity in the table signifies a generic technology, user, or task and a high level of specificity signifies an identified technology, user, or task.

RESEARCH PROCESS					
Stage	**Source**	**Degree of Specificity**			**Outcome**
		Tech	**User**	**Task**	
1	**Literature Review** --Chapter 2--	**Low**	**Low**	**Low**	– Six generic SNS affordances – Six music consumption tasks
2	**System Inventory** **--**Chapter 4--	**High**	**Low**	**Low**	– 18 technical SNS features, functionalities & instantiations
3	**Interviews** --Chapter 5--	**Low**	**High**	**High**	– Four classifications of users – Three activity process models
4	**Interviews** --Chapter 5--	**High**	**High**	**High**	– Seven SNS affordances for the consumption of music

Table 3-7: Stages of the Research Process

Therefore, stage one represents the literature review, whereby no specific technology, user, or task is specified and hence they are characterised as low. This stage resulted in six generic SNS affordances grouped into two types: social and content affordances. In addition, six music consumption tasks were defined and grouped into three types of activities: information seeking, information encountering, and information sharing. A general overview of SNS users and music consumers was also outlined. This stage provided the least insight and was based on gathering knowledge from previous research to understand the generic affordances of a system. The richest insight was is in the combination of all three elements to the highest degree of specificity (*i.e.* stage four); where a specific technology, specific user and a specific set of tasks is under examination. This stage resulted in the actual affordances of SNS for the consumption of music. The way in which these stages were implemented is displayed in Figure 3-3.

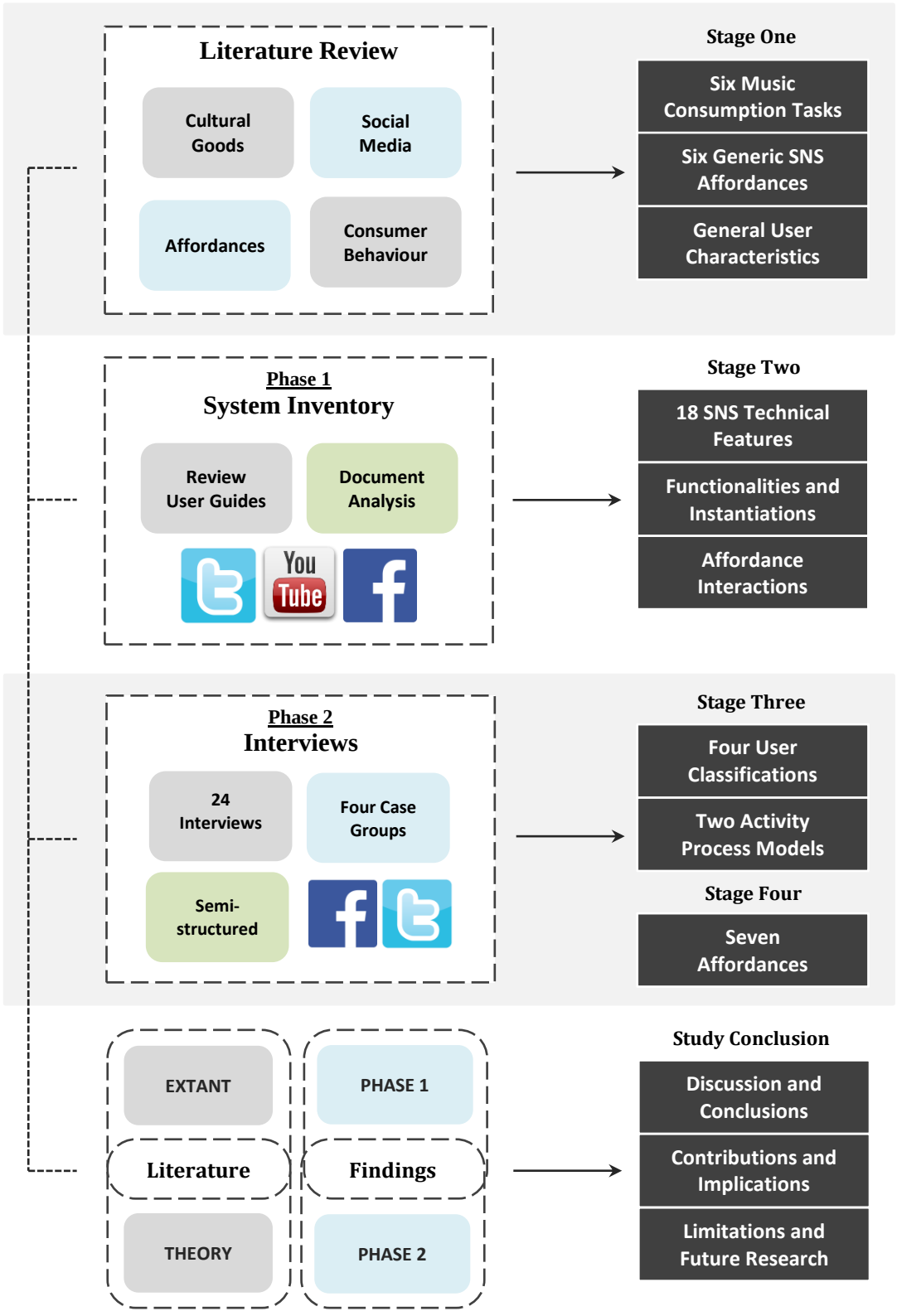


Figure 3-3: Study Design

3.3.1 Case Study Environments

The following sections outline the case study environments for both phases of data collection before presenting the implementation of data collection and analysis for each. Three social network sites were selected and described in the context of the system inventory: Facebook, YouTube, and Twitter. The interview case sites consisted of two social network sites: Facebook and Twitter, divided in four music specific groups.

3.3.1.1 Phase One Case Study Environments: System Inventory

For phase one of data collection (*i.e.* the system inventory) three social network sites were selected from a list based on: (1) page rank (using data from Alexa.com), (2) type of social network site, and (3) registered users. The SNS chosen are some of the top visited sites on the Web; their rank determined based on a calculation of average daily visitors and page views (Alexa, 2011).

Additionally, the three sites selected are all different types of social network systems. Facebook is a general social network site built around an individual's personal network. Facebook facilitates users to connect and share information with a bounded group of connections. YouTube is a video sharing site with built-in social networking features. YouTube's primary focus is the viewing and sharing of videos. The use of recommendations and browsing history is an important way for people to discover new content and navigate through the website. Twitter is a micro-blogging tool that enables users to discover up-to-date content and to share content with a group of followers. Twitter tracks content trends and facilitates people to interact on a global level.

The three SNS differ in the way content is shared and organised, but all are 'general' in nature, *i.e.* do not have any specific criterion for the type of content shared. The SNS chosen have a large base of registered users, which demonstrates their popularity and influence. The demographic for the selected SNS have a wide range but are typically associated with ages 25-54 (KissMetrics 2011; YouTube, 2011). These particular social network sites can be linked with each other either through connected accounts or 'autoshare', and external content can be embedded/shared within each site. Table 3-8 displays the case sites information including global rank, SNS type, description, and estimated registered/unique users of each site.

SNS PAGE RANK AND GENERAL STATISTICS			
Site Rank	**SNS Type**	**Description**	**Users Base**
#2 - Facebook	Social Network	Connects people to share links, videos, information, content, *etc.*	800m+
#3 - YouTube	Video Sharing	Enables users to upload, tag and share videos in a social setting	800m+
#9 - Twitter	Micro-blogging	Real-time information network for discovering latest content	400m+

Table 3-8: Social Network Site Page Rank and General Statistics

Statistical data on the three SNS user demographics was derived from Alexa (2011) and DoubleClick AdPlanner (Google, 2011). The age range across the three sites is broad. Sixty to seventy per cent of users are between the ages of 25-64. However, the spectrum of users ranges from the lowest age range of 0-17 to the highest at 65 years or more – across all three SNS. See Figure 3-4 for more detail on the age of SNS users.

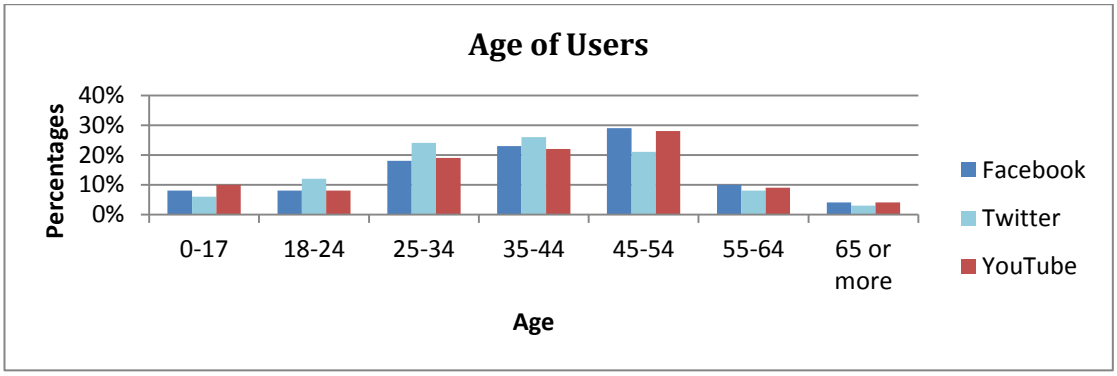


Figure 3-4: Percentage of SNS User Ages

The user's gender for all three SNS is similar. For all of them, SNS females make up the majority of users by a small proportion. This distinction is an average of 16% more females than males, with Twitter displaying the largest female to male ratio (24% more female users). Figure 3-5 displays the percentages of SNS user gender.

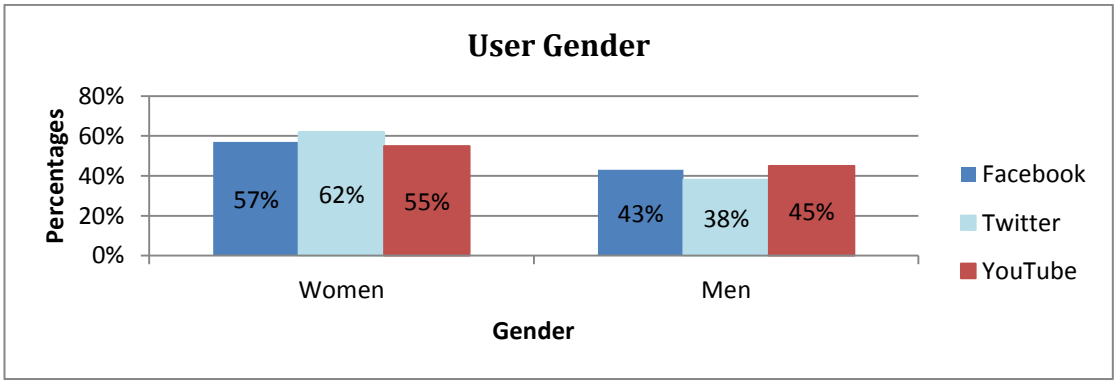


Figure 3-5: Percentage of SNS User Genders

SNS user education however, shows marked differences between the majority and minority of users. Over 50% of users have 'some college' while the education for the rest of the users is distributed across the other variables (< high school diploma; high school; bachelor's degree; and graduate degree). See Figure 3-6 for a display of the education distribution.

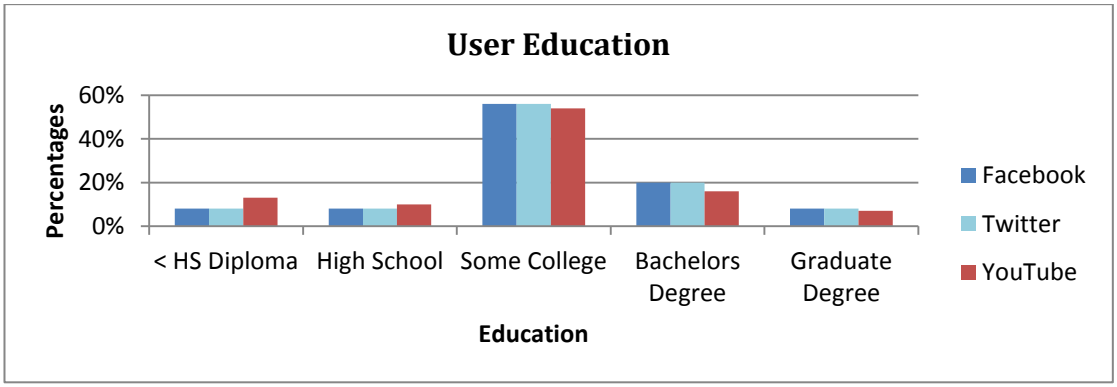


Figure 3-6: Percentage of SNS User Education

Household income shows a higher percentage of users within the range of $25,000-$75,000, with an average of 66% of the users. Figure 3-7 displays the range of household incomes across the three SNS.

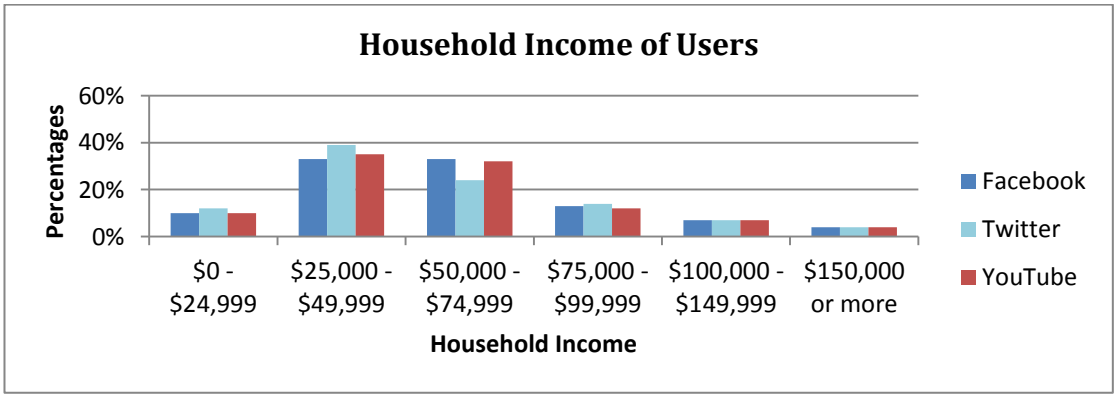


Figure 3-7: Percentage of SNS User Household Income

Table 3-9 displays the average user demographics of the three SNS – based on the data from above.

AVERAGE SNS USER DEMOGRAPHICS		
Gender	Female avg. 58%	Male avg. 42%
Age	25 – 54 years old	approx. 70% of users
Household Income	$25,000 - $75,000	approx. 60% of users
Education	Some College	approx. 50% of users

Table 3-9: Average SNS User Demographics

All three SNS have similar user demographics, while each present a unique service in conjunction with general social networking capabilities. For these reasons and their overall popularity as social network site platforms, they have been chosen for phase one of data collection, to document the technical features of SNS in the context of the generic SNS affordances. The following sections describe the three sites in more detail, highlighting individual traits.

Facebook (Help Centre Documentation)

Facebook is a social networking site, launched in 2004, that enables users to meet and link with friends in order to keep up-to-date with what they are doing. The site is "tightly integrated into the daily media practices of its users: the typical user spends about 20 minutes a day on the site, and two-thirds of users log in at least once a day" (Ellison *et al.*, 2007, p. 1144). On Facebook users create a personal profile by uploading a picture and adding details such as username, date of birth, personal interests, and other personal information. Facebook allows a user to create a community base of friends. There are also applications and games available, such as iLike (a music application), 'photo of the day', gaming applications and many others. These applications pull information from a user's profile and post activity to the surrounding network. Users also join groups/forums of interest and follow these via activity feeds populated with user-generated content. Many users share information with their friends such as links to YouTube videos, comments and opinions, website links, general conversation and other content. These posts are known as status updates and automatically aggregate to activity feeds of a user's connections. A status update can be liked, shared, tagged and create further discourse through commenting features. The following Facebook statistics were extracted from Alexa (2011) and DoubleClick AdPlanner (Google, 2011):

- Launched in 2004
- Over 700 million users
- About 6% of visits to Facebook are referred by search engines
- Facebook visitors spend around 32 minutes on the site and 37 seconds per page view
- 1,216,699 sites linking to Facebook
- Average load time for Facebook: 2.025 seconds/ 68% of sites are faster

YouTube (About YouTube and YouTube Help Centre Documentation)

YouTube is different from the other social network sites as it is mainly a video sharing platform and is accessible and useful even without the social networking capabilities. Even though the social network capabilities are less emphasised, users can still create profiles and a community of friends to share information and content with. The music dynamic is more implicit and is embedded within the video site and is often used as a mechanism for sharing music content within the other social network platforms. YouTube is one of the largest video sharing sites on the Internet with an estimated 100 million video views per day (Gill *et al.*, 2007). YouTube accounts for approximately 60% of the videos watched on the Internet, which grows at a rapid pace with 65,000 video uploads per day (Gill *et al.*, 2007). Many people use YouTube as a form of sampling music and it allows users to search for music videos and create playlists as well as aggregating favourite videos to their profiles. People comment on video content, but video uploads remain the main form of content sharing. The following YouTube statistics were extracted from Alexa (2011) and DoubleClick AdPlanner (Google, 2011):

- YouTube.com has been online since 2005
- Around 27% of visits to YouTube are bounces (only one page view)
- 755,792 sites linking into YouTube
- Average Load Time for YouTube: 1.457 seconds / 51% of sites are faster

Twitter (About Twitter and Help Centre Documentation)

Twitter is a microblogging platform that lets users write short posts or 'tweets' (less than 140 characters) that facilitate quick and immediate updates to a social network (Java *et al.* 2007). Twitter supports an array of applications and methods for posting messages to the network including SMS, web-based, desktop, and mobile applications as well as the ability to create automated tweets and integration across other web services (Naaman *et al.*, 2010). The posts are either direct or indirect in nature, whereby a user may specify a contact for which the post is directed to or post an open indirect message to the network (Naaman *et al.*, 2010; Huberman *et al.*, 2008). "Around 25.4% of all posts are directed, which shows that this feature is widely used among Twitter users" (Huberman *et al.*, 2008, para. 7). Unlike Facebook however, these directed messages are accessible to both the network and

the public via the timeline or search function (Huberman *et al.*, 2008). The following Twitter statistics were extracted from Alexa (2011) and DoubleClick AdPlanner (Google, 2011):

- Twitter launched to the public in 2006
- Around 39% of visits to Twitter are bounces (only one page view)
- Twitters visitors view and average of 3 – 5 unique pages
- Twitter visitors spend around 7 minutes on the site and 51 seconds per page view
- 1,029,011 sites linking into Twitter
- Average Load Time for Twitter: 1.729 seconds / 60% of sites are faster

3.3.1.2 Phase Two Case Study Environments: Interviews

This phase involved a case study conducted in two social network sites: Facebook and Twitter. Respondents were sampled based on cluster sampling techniques to ensure relevancy to music consumption in the participants SNS usage (*cf.* Hair *et al.*, 2007). Hence, within each social network site two groups were selected: a general music group and a musician-specific group, with six respondents from each, resulting in twenty-four interview in total (see table Table 3-10). An overview of each social network site and case group is provided in the following sections.

CASE STUDY ENVIRONMENTS					
SNS		**SNS Type**	**Group**	**Focus**	**#**
Case 1	Facebook	General SNS	Plugd Records	General – Record Store	6
			Bjork	Specific – Musician	6
Case 2	Twitter	Micro Blogging	Guardian Music	General – Newspaper	6
			Amanda Palmer	Specific – Musician	6

Table 3-10: Interview Case Sites and Case Groups

Facebook: General Music Group and Musician-Specific Group

Facebook is a social network site connecting 1.19 billion active users and was founded in February 2004 (Facebook, 2013), headquartered in Menlo Park, California. Facebook itself states that its "mission is to give people the power to share and make the world more open and connected" (Facebook, 2013). Facebook enables users to connect with friends, follow pages and groups, post status updates, and share and discover content amongst other activities. The two Facebook groups in

this case consist of users who follow a general music page: Plugd Records and a specific musician page: Bjork.

General Music Group: Plugd Records

Plugd Records is an independent record shop in Cork, Ireland. Plugd Records sells music on CD and vinyl for a wide range of genres, with an emphasis on alternative music. Plugd Records' Facebook page has fewer than 3500 followers and focuses on building a community of local consumers interested in broad music tastes and local music gigs. Plugd Records also hosts music events and publishes updates about any live music gigs and upcoming music releases. Users can only see other people in this group if they already share a connection or a user has posted directly to the Plugd Records profile page. Users interact with the Plugd Records page with questions about music in the store, updates for local and non-local gigs, requests for information and general music conversation. Numerous musical genres are represented via Plugd Records and will appeal to a variety of people. The interests of the people linked to this group may vary and they may all have different musical tastes. It is both a homogenous group of users based on specific criteria, *i.e.* Plugd Records and an interest in music, but will also display heterogeneous characteristics as a result of a variety of music consumers with varying music tastes and motivations for following the page. User activity may vary based on these conditions. The page has been active since October 2009. Below is a screenshot of Plugd Records' homepage as of Autumn 2013 (Figure 3-8).



Figure 3-8: Plugd Records Homepage Screenshot (captured Autumn 2013)

Specific Musician Group: Bjork

Bjork is an Icelandic singer songwriter and producer. Her musical style is eclectic and can be described by the following genres (as stated on her Facebook page): alternative rock, electronica, trip-hop, jazz, and baroque pop. She has approximately 2,900,000 followers on her Facebook page and posts updates about upcoming events, new releases, promotional material, art and images, and interesting facts about Bjork. Users follow this page to keep up-to-date with Bjork's activity stream which is added to their newsfeed. Users can post questions or have conversations on this page, and similar to Plugd Records can only view other members of this group through the public posts to Bjork's wall, unless there is a shared connection. This page represents Bjork as a brand and is not directly updated by Bjork. The page has been active since December 2007. Below is a screenshot of Bjork's homepage as of Autumn 2013 (Figure 3-9).



Figure 3-9: Bjork Homepage Screenshot (captured Autumn 2013)

Twitter: General Music Group and Musician-Specific Group

Twitter is a micro-blogging tool and social network site with 500 million total users and more than 215 million active users (Twitter, 2013). Twitter was founded in 2006 in San Francisco. Twitter helps people "create and share ideas and information instantly, without barriers…[and] is the best way to connect with people, express yourself and discover what's happening" (Twitter, 2013). Twitter enables users to create a profile page and follow other pages. Posts to the Twitter network are short messages of 140 characters, creating a tone of quick immediate information flows.

The two Twitter groups in this case study consist of users following a general music page: Guardian Music and a specific musician page: Amanda Palmer.

General Music Group: Guardian Music

Guardian Music is a Twitter page dedicated to posting updates from the music section of the Guardian newspaper based in London, UK. Guardian Music has almost 300,000 followers and to date has posted more than 15,400 times. The page has been active since June 2008 and links to the main Guardian newspaper website. The page posts updates from newspaper articles with a variety of music news, including blog posts about music and music content. Music videos and images are also posted on the Twitter page. Similar to the Facebook general music group, users who follow this Twitter page are interested in music information, news, and discovery. People following the Guardian Music Twitter page are visible to all other users. Guardian Music 'tweet' regular updates on music news articles, which involve a range of musical genres and interests. Followers can 'retweet' these updates or message directly to Guardian Music with questions or information. Users following this profile will also vary in musical tastes and interests and was chosen for this reason. Below is a screenshot of Guardian Music's homepage as of Autumn 2013 (Figure 3-10).



Figure 3-10: Guardian Music Homepage Screenshot (captured Autumn 2013)

Specific Musician Group: Amanda Palmer

Amanda Palmer is the lead singer and songwriter of the band 'Amanda Palmer and the Grand Theft Orchestra', from Boston, USA. The genres for her music include dark cabaret, alternative dance, piano rock, indie pop, *etc.* Palmer uses her Twitter page to interact directly with her fans. Palmer's interactions include promotional material, music updates, and general conversations. Her Twitter also links with her own website and blog posts. She has approximately 1,000,000 followers and has posted more than 54,600 times since November 2008. Unlike the other three case sites, Amanda Palmer is the direct contact for the page. The other case sites have no directly identifiable moderator of the page. However, out of all of the other case sites Plugd Records – because of its local following and community-like presence – is most likely to share characteristics. Palmer herself is very active on Twitter and her posts range from professional to personal. People follow Palmer's page for a variety of reasons, whether it is to keep up-to-date with news, music releases, touring information or just to connect with her because she is openly involved in her page and engages directly with her audience. Below is a screenshot of Amanda Palmer's homepage as of Autumn 2013 (Figure 3-11).



Figure 3-11: Amanda Palmer Homepage Screenshot (captured Autumn 2013)

See Table 3-11 for an overview of each page within the case sites, with details on the number of followers of the profile and the number of years since the profile was created.

CASE STUDY SITE DETAILS				
SNS	**Group**	**Name**	**Followers**	**Years Joined**
Facebook	General	Plugd Records	<3,500	4 years
	Musician	Bjork	<2,900,000	6 years
Twitter	General	Guardian Music	<300,000	5 years
	Musician	Amanda Palmer	<1,000,000	5 years

Table 3-11: Interview Case Study Site Details

Each type of group shares certain characteristics as stated above, however, all four sites offer a diverse perspective based on the size of followers and the unique qualities of each site.

Interview Respondent Classifications

The following section examines the interview respondents in detail through a comparison of music consumption intensity and social network site usage intensity. The users displayed varying degrees of intensity when consuming music and in their use of social network systems. They were assigned a low, medium, or high intensity classification according to the data obtained. Using this classification as well as self-reported accounts, users were then categorised as either active or passive respondents. Active respondents dynamically engaged when consuming music and participated mindfully in this practice. This was also true in the context of social network site use, respondents actively participated in their network by contributing, participating, and sharing. Passive users, in contrast, were more willing to take a back seat when consuming music or in their use of the social network platform. These users were receptive to content but didn't actively seek or engage as much as their counterparts. Both user intensity and activity/passivity are compared resulting in a respondent classification graph.

Active and Passive User Classifications

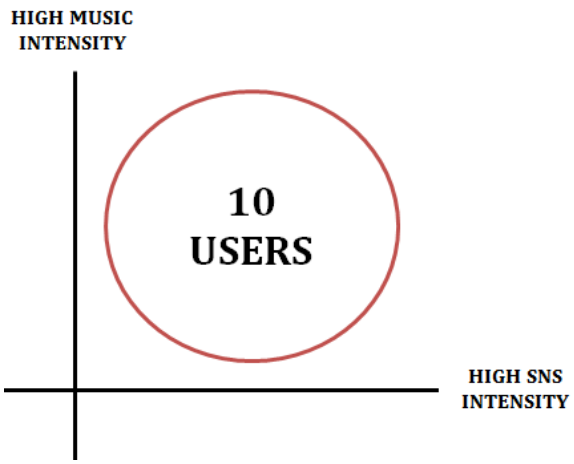
Capturing the respondent classifications, Table 3-12 compares the users across both music consumption intensity and social network site use intensity. Included in this table is a comparison of (1) music and SNS user type, (2) hours spent on music consumption and SNS use, and (3) music and SNS intensity categories. Where users stated that they spent many hours consuming music a day, it was not necessarily through the use of social network sites that this was occurring. In the table, it is evident that there is a wide gap between the hours spent on the SNS case site and the hours spent consuming music. Users stated in the interviews that they used a number

of methods and/or technologies for consuming music, not just the case site. Furthermore, it is assumed that the hours spent on SNS activities on a given day may not be music-specific. Hence, where users intensely engaged with music consumption it was not automatically aligned with an intensity in SNS usage. To capture this Figure 3-13 is used to denote the variations in the different types of SNS users and the different music consumption practices. This figure and the related groupings are discussed below.

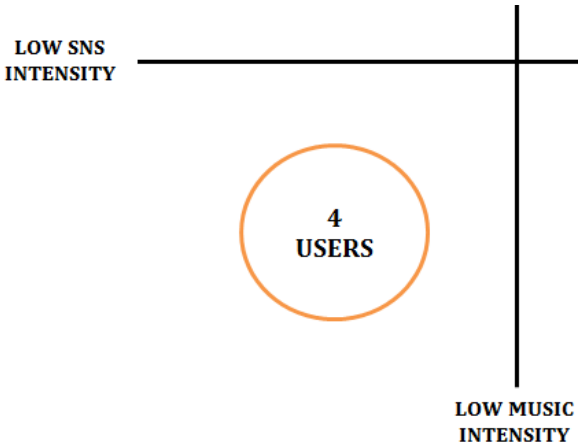
COMPARISON OF MUSIC INTENSITY AND SNS INTENSITY						
User Group	**Music User Type**	**SNS User Type**	**Music Hours**	**SNS Hours**	**Music Intensity**	**SNS Intensity**
Facebook – General Group – Plugd Records (PR)						
PR 1 DOM	Passive	Passive	<2 Hours	<1 Hour	Medium	Medium
PR 2 GM	Active	Active	<7 Hours	<1 Hour	High	High
PR 3 MMC	Active	Active	<7 Hours	Brief Visits	High	High
PR 4 RL	Active	Active	<3 Hours	Brief Visits	High	High
PR 5 GS	Active	Active	<5 Hours	<2 Hours	High	High
PR 6 ND	Active	Active	<8 Hours	<4 Hours	High	High
Facebook – Musician Group – Bjork (BK)						
BK 1 AOD	Active	Passive	<5 Hours	<2 Hours	High	Low
BK 2 CG	Passive	Passive	<1 Hour	<1 Hour	Medium	Low
BK 3 DH	Passive	Passive	<1 Hour	Brief Visits	Low	Low
BK 4 BOD	Active	Active	<5 Hours	Brief Visits	High	Medium
BK 5 AT	Active	Active	<10 Hours	Brief Visits	High	High
BK 6 EC	Active	Active	<2 Hours	<1 Hour	High	High
Twitter – General Group – Guardian Music (GM)						
GM 1 ML	Active	Passive	<2 Hours	<1 Hour	Medium	Medium
GM 2 SOS	Active	Active	<1 Hour	<2 Hours	Medium	Medium
GM 3 JM	Active	Active	<9 Hours	Brief Visits	High	High
GM 4 TL	Active	Active	<6 Hours	<1 Hour	High	High
GM 5 TM	Passive	Active	<1 Hour	<3 Hours	Low	High
GM 6 HL	Active	Active	<8 Hours	Brief Visits	High	High
Twitter – Musician Group – Amanda Palmer (AP)						
AP 1 KH	Active	Active	<5 Hours	<2 Hours	Medium	Medium
AP 2 EB	Passive	Passive	<2 Hours	Brief Visits	Low	Low
AP 3 EMP	Active	Passive	<4 Hours	<2 Hours	Medium	Low
AP 4 JW	Active	Passive	<8 Hours	<2 Hours	High	Medium
AP 5 SPL	Passive	Passive	<5 Hours	<1 Hour	Low	Low
AP 6 MK	Passive	Passive	<4 Hours	<2 Hours	Low	Low

Table 3-12: Comparison of Music Intensity and SNS Intensity

The most common grouping was ten users with high music intensity and high SNS intensity (42% of all users). The majority of these users were situated in the general music group (80%) with five users in the Facebook general group (50%), three users from the Twitter general group (30%), and two from the Facebook musician group (20%). These users are all categorised as active users on both counts.



Directly opposing the first grouping display is the low SNS and low music intensity classification with a total of four users (17% of all users). These users are all from the two musician-specific groups, one from the Facebook group and three from the Twitter group. These users were all categorised as passive user types (music and SNS).



The next display consists of users with a variation of medium intensity levels. Two groupings shared medium SNS intensity with differing music intensity: four with the medium music intensity (17% of users) and two with high music intensity (8% of users). The other grouping consisted of a medium music intensity and a low SNS intensity, with two users in total (8% of users). They ranged from active to passive user types, or had a mix of both. They did not spend as much time as the high intensity users to be categorised thusly, while displaying more active behaviours than the extremely low intensity users. The medium types are the most diverse set of users and were uniformly spread across all four case site groups, with two to three users from each.

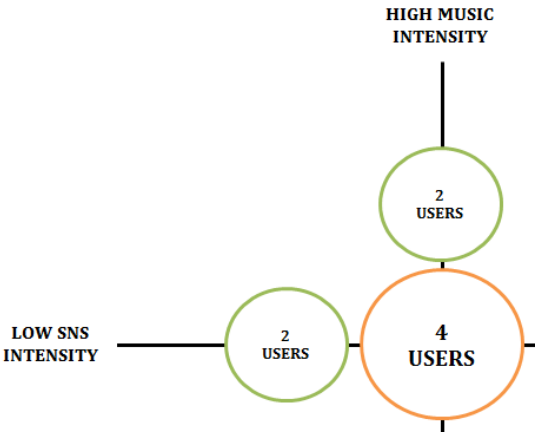
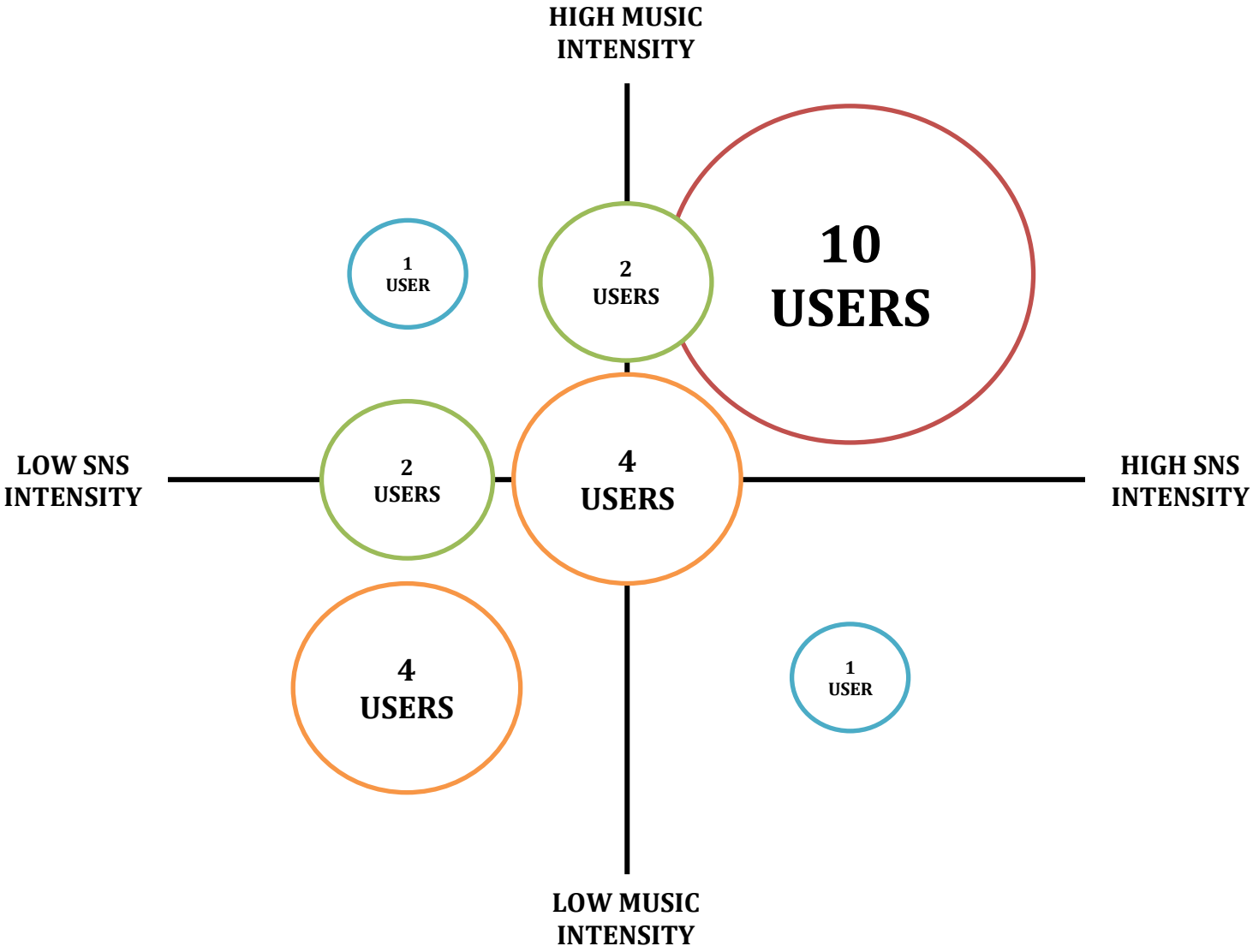
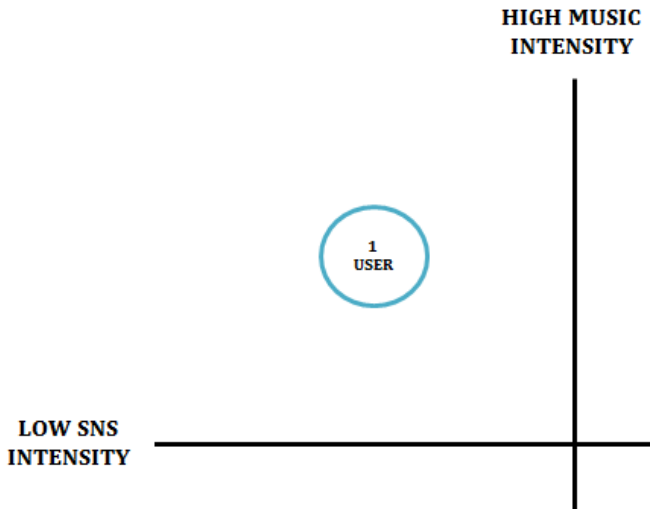


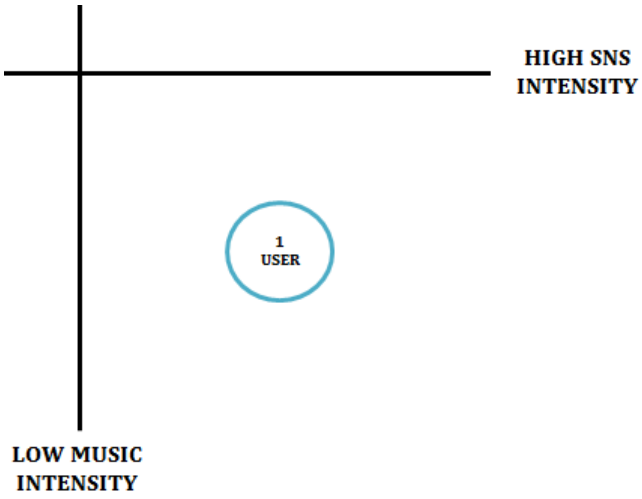
Figure 3-12: Comparison of Respondent Intensity Levels



The two remaining user groupings had only one user in each. One user was an active high intensity music consumer (4% of users), but in contrast, did not intensively use SNS. This user is a passive SNS user, who does not engage or participate heavily within their social network. This user was a part of the Facebook musician group.



The final grouping is the direct opposite of the above, with an active high intensity SNS user classification, but with a user who is a passive low intensity music consumer (4% of users). This user is a part of the Twitter general music group and is actively engaged in their network and often participated and engaged in active SNS behaviours while spending very little time actively engaging in music consumption.



This analysis resulted in seven groupings of users within the case sites. These groupings were used for comparative reasons during analysis, but where relevant, a set of four classifications was used for more general comparisons. The active versus passive user classification type creates a distinction between users where active/passive did not ascribe to high/low intensity and thus the users that were in the medium intensity grouping,

Some users were active medium intensity and others passive medium intensity. By using the active and passive label the users can thus be moved up into the higher quadrants or down into the lower quadrants. For example, a user characterised as medium intensity but who displayed active type characteristics has now become a part of the upper quadrants. These users might be misrepresented as inactive due to

medium intensity but were in fact active participants who self-reported less time spent than others in consumption activities or time spent on SNS, but engaged and participated like a high intensity user and vice versa.

The four higher level classifications are as follows (see Figure 3-13):

Classification 1: Active Music Consumers/Active SNS Users (13 users: 54%)

Classification 2: Active Music Consumers/Passive SNS Users (4 users: 17%)

Classification 3: Passive Music Consumers/Passive SNS Users (6 users: 25%)

Classification 4: Passive Music Consumers/Active SNS Users (1 user: 4%)

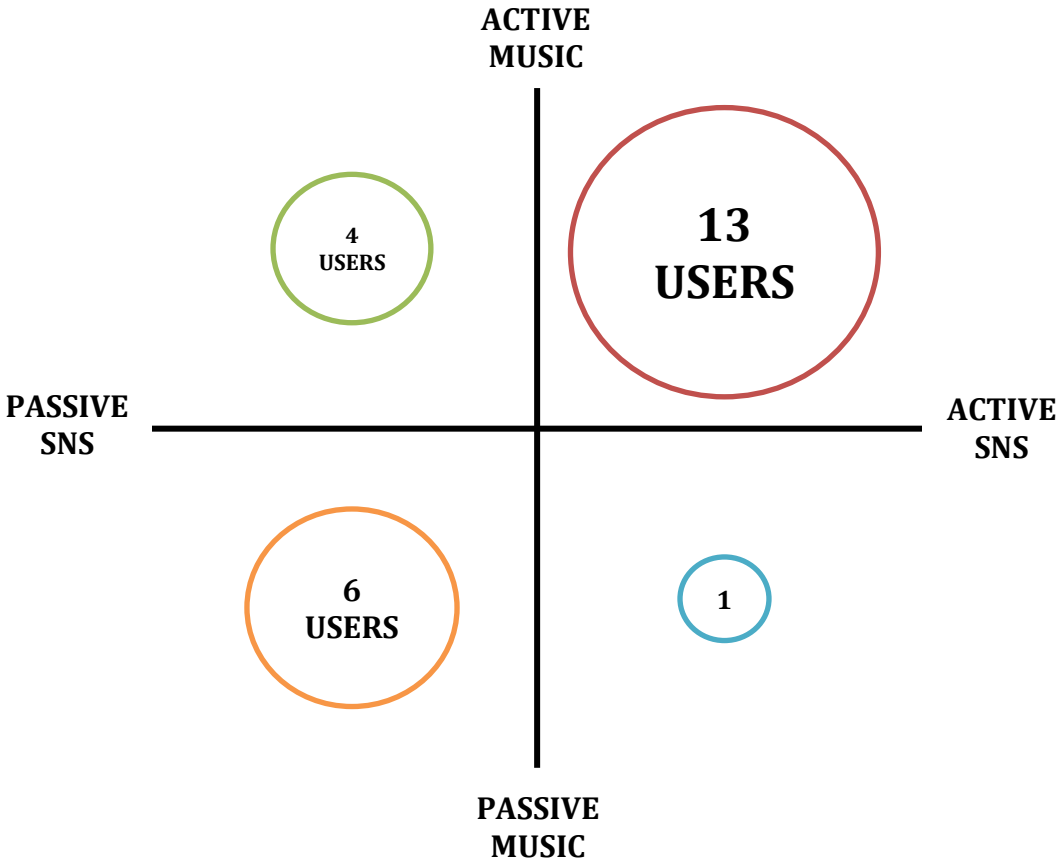


Figure 3-13: Comparison of Active-Passive User Types

For further breakdown of these classifications see Table 3-13 which presents the comparison of active and passive user types across both the case sites and the case groups.

User Type		Twitter		Facebook		
		General	Musician	General	Musician	
Music	**SNS**	Guardian Music	Amanda Palmer	Plugd Records	Bjork	**Total**
Active	Passive	**1**	**2**	**0**	**1**	**4**
Active	Active	**4**	**1**	**5**	**3**	**13**
Passive	Passive	**0**	**3**	**1**	**2**	**6**
Passive	Active	**1**	**0**	**0**	**0**	**1**

Table 3-13: Comparison of User Types across Case Sites and Groups

This classification of user types has been further broken down in Figure 3-14 to display which users were a part of which group (for reference when presenting activity and affordance findings). The green circles represent the total number of users within each quadrant and the counts for each individual case site are presented above the group name:

- **PR:** Plugd Records (Facebook)
- **BK:** Bjork (Facebook)
- **GM:** Guardian Music (Twitter)
- **AP:** Amanda Palmer (Twitter)

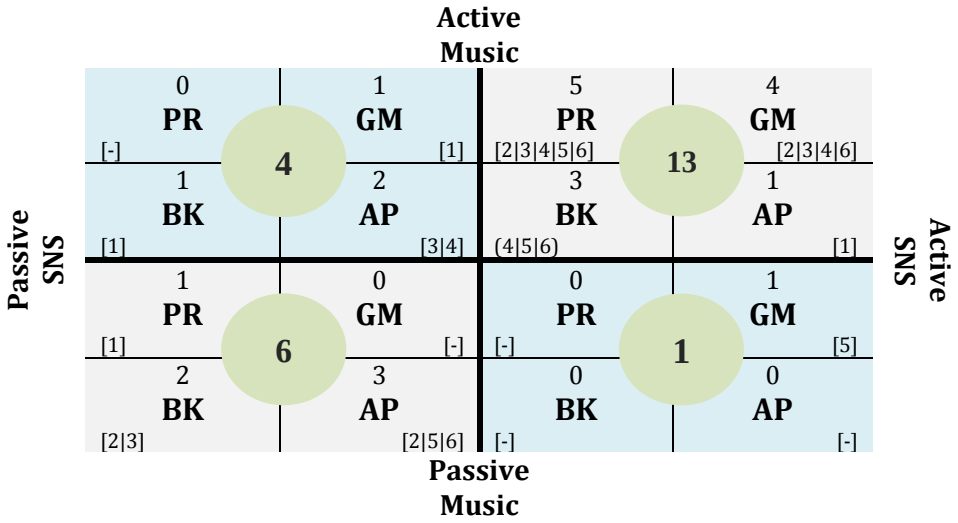
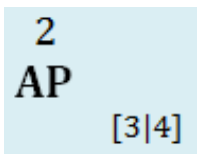


Figure 3-14: Display of Active-Passive User Types in Case Sites

In square brackets is the corresponding respondent number from each case site group. For example take:



These characters represent:

- two users from the Twitter Amanda Palmer case site;
- specifically respondents AP3 and AP4;
- within the active music and passive SNS quadrant.

The grey coloured quadrants are in opposition with each other and users mirror active-active or passive-passive classifications. The blue quadrants represent the set of users with a mix of active-passive and passive-active classifications.

3.3.2 Data Collection

Typically, case study research uses multiple data collection methods whereby evidence from two or more sources is used to support research findings (Garton *et al.*, 1997; Benbasat *et al.*, 1987). Furthermore, the combination of two data collection methods allows for data triangulation with stronger substantiation of constructs and hypotheses (Eisenhardt, 1989). Hence, two phases of data collection were implemented in this study: a (1) system inventory and (2) interviews. Both phases of data collection are described in the following sections.

3.3.2.1 Phase One Data Collection: System Inventory

To address research question one: *what are the technical features of SNS?* a system inventory was conducted on three selected social network sites: Facebook, YouTube, and Twitter. The system inventory used documentation, direct observation, and physical artifacts as sources of evidence (Yin, 1989):

- **Documentation** – written material ranging from memoranda to newspaper clippings to formal reports
- **Direct observation** – absorbing and noting details, actions, or subtleties of the field environment
- **Physical artifacts** – devices, outputs, tools

The system inventory involved examining the user guides and help documentation of the three selected SNS. In addition, direct observation and an examination of the physical artifact (*i.e.* selected SNS platform) was conducted when necessary to clarify features and their functionalities. Thus, the two stages of the system inventory were:

1. *Documentation Analysis*: content analysis of system help guides for end-users with a focus on technical features and functionality.
2. *System Analysis*: examination of live system features to validate data in documentation analysis and to further explore features of the system.

This phase of data collection helps us understand the technical artifact (*i.e.* SNS) in more detail, specifically from the perspective of the system designers and their design intentions.

3.3.2.2 Phase Two Data Collection: Interviews

In order to answer research question two and three: *what activities do users undertake when consuming cultural goods in SNS?* and *what are the affordances of SNS for the consumption of cultural goods?*, 24 interviews were conducted in two social network sites: Facebook and Twitter. The advantage of using an interview is that the focus is directly on the case topic and it helps to provide perceived causal inferences in the context of complex issues (Hair *et al.*, 2007; Yin, 1994; Yin, 1989). Furthermore, the relevancy of interviews to investigate the affordances of SNS for consuming music is further justified by the fact that self-reporting through recall may be better for the perceptions of media use, while data gathered by observation may be better for measuring actual use (Garton *et al.*, 1997). Interviews consist of a guided conversation with the respondents of a study (Hair *et al.*, 2007).

A semi-structured interview guide (see Appendix A-1) was developed based on prior instrumentation to reduce the threat of superfluous information and support dependable and meaningful findings (*cf.* Hair *et al.*, 2007; Miles and Huberman, 1994; Yin, 1989). The music consumption activities and any user characteristics outlined in the literature review were used in the development of the guide, while also allowing for flexibility to include unstructured questioning (*cf.* Hair *et al.*, 2007; Eisenhardt, 1989). By using an interview guide and applying prior instrumentation in its construction, the study reduced the weaknesses associated with interviews, such as bias due to poorly constructed questions (*cf.* Yin, 1989). Furthermore, the questions were developed in a way to help avoid reflectivity (interviewee gives the interviewer what they want to hear) by excluding leading style questions (*cf.* Yin, 1989).

Multiple cases were investigated for a more in-depth understanding of music consumption activities in social network sites (*cf.* Dubé and Paré, 2003; Yin, 1994). A single-case design was initially considered, for the representativeness of the case but was discounted because of the criticism directed at single-case research, which are often incapable of providing a generalisable conclusion (Dubé and Paré, 2003; Yin, 2003). Hence, two case sites were selected: Twitter and Facebook and within these case sites, two further groups were identified: (1) a general music group and (2) a specific music group. This ensured that both SNS users and music consumers were the focus of the study. Moreover, it facilitated the researcher to conduct within-case and cross-case analysis for both the case sites and the case groups. This phase of data collection provided a comprehensive view of the users and the activities they engaged in for the consumption of music using SNS. Like phase one of data collection, where necessary, direct observation was utilised and the physical artifact (*i.e.* selected SNS platform) was referenced to clarify the findings from the interviews.

Interview Respondents

There were twenty synchronous interviews ranging from 14 minutes to 75 minutes in duration, with an average of 28 minutes. The interviews were recorded using a digital recording device resulting in approximately 10 hours of audio content. Interviews were conducted face-to-face, over the phone and using Skype (VoIP). The remaining four interviews were asynchronous in nature through the use of an email questionnaire – as some users were in different time zones and an appropriate time to engage in synchronous communication was unavailable. Hence, an email questionnaire was sent to these respondents, with follow up questions to clarify the questionnaire responses. The respondents were in various locations when the interviews were conducted including Ireland, the United Kingdom, Amsterdam, Spain, Canada and the United States of America. See Table 3-14 for an overview of the case study respondents and the interview details.

The interview respondent data was examined in detail according to the demographic data gathered, as well as a comparison across music consumption intensity and social network site usage intensity. The users displayed varying degrees of intensity when consuming music and in their use of social network systems and were assigned a low, medium, or high intensity classification according to the data obtained. Using

this classification as well as self-reported accounts, users were then categorised as either active or passive respondents for use in the interview findings.

CASE STUDY RESPONDENTS AND INTERVIEW DETAILS						
#	**Group**	**Initials**	**Interview Format**	**Date**	**Duration**	**Location**
Facebook – General Group – Plugd Records (PR)						
1	PR	DOM	Skype	14-03-12	25:03	USA
2	PR	GM	Face-to-Face	21-03-12	59:43	Ireland
3	PR	MMC	Face-to-Face	11-10-12	27:31	Ireland
4	PR	RL	Face-to-Face	07-11-12	44:31	Ireland
5	PR	ND	Face-to-Face	07-11-12	26:10	Ireland
6	PR	GS	Face-to-Face	08-11-12	23:07	Ireland
Facebook – Musician Group – Bjork (BK)						
1	BK	AOD	Face-to-Face	05-02-12	15:38	Ireland
2	BK	CG	Skype	21-02-12	21:11	Ireland
3	BK	DH	Telephone	04-03-12	20:19	Ireland
4	BK	BOD	Face-to-Face	08-10-12	23:57	Ireland
5	BK	AT	Face-to-Face	10-10-12	17:38	Ireland
6	BK	EC	Face-to-Face	11-10-12	19:45	Ireland
Twitter – General Group – Guardian Music (GM)						
1	GM	ML	Telephone	01-03-12	13:43	UK
2	GM	SOS	Face-to-Face	04-10-12	75:01	Ireland
3	GM	JM	Skype	26-11-12	31:17	UK
4	GM	TL	Skype	26-11-12	20:58	Amsterdam
5	GM	TM	Face-to-Face	27-11-12	21:10	Ireland
6	GM	HL	Skype	30-11-12	53:49	UK
Twitter – Musician Group – Amanda Palmer (AP)						
1	AP	KH	Email Questionnaire	30-11-12	N/A	USA
2	AP	EB	Email Questionnaire	01-12-12	N/A	Spain
3	AP	EMP	Email Questionnaire	02-12-12	N/A	UK
4	AP	JW	Skype	05-12-12	22:16	USA
5	AP	SPL	Skype	05-12-12	13:56	USA
6	AP	MK	Email Questionnaire	16-01-13	N/A	Canada

Table 3-14: Interview Respondents and Interview Details

Active respondents dynamically engaged when consuming music and participated mindfully in this practice. This was also true in the context of social network sites, users actively participated in the network by contributing, participating, and sharing. Passive users in contrast were more willing to take a back seat when consuming music or in their use of the social network platform. These users were receptive to content but didn't actively seek or engage as much as their counterparts.

Interview Respondent Demographics

The interview demographic data collected included: (1) age range, (2) gender, (3) the devices used to access social network sites, (4) general SNS use in years, (5) general SNS use frequency (daily/weekly/monthly), and (6) computer self-efficacy. All

respondents were confident in their computer self-efficacy and all respondents used SNS daily, thus this data is not represented in Table 3-15.

There were 17 male respondents and seven female respondents and ages ranged from the 16-20 year old category to 41-45 years old, with an average age range of 26-30 years. Respondents have been using general social network sites for an average of seven years, with the shortest time being over three years and the longest more than 13 years. The interview respondents used a combination of devices to access social network sites including: phone, desktop, laptop, and tablet. The most popular device mentioned was a laptop, common to 20 respondents. Mobile phones were next with 19 mentions, followed by the use of a desktop with 10 mentions and finally by tablets with nine mentions.

INTERVIEW RESPONDENT DEMOGRAPHICS				
Group	**Age Range**	**Gender**	**Devices**	**SNS Use**
Facebook – General Group – Plugd Records (PR)				
PR 1 DOM	26-30	Male	Phone	>7 years
PR 2 GM	26-30	Male	Phone, Desktop, Laptop	>5 years
PR 3 MMC	26-30	Male	Phone, Desktop, Laptop, Tablet	>13 years
PR 4 RL	31-35	Male	Phone, Desktop, Laptop	>9 years
PR 5 GS	26-30	Male	Desktop	>7 years
PR 5 ND	21-25	Male	Laptop	>7 years
Facebook – Musician Group – Bjork (BK)				
BK 1 AOD	26-30	Male	Laptop	>6 years
BK 2 CG	26-30	Female	Phone, Laptop	>6 years
BK 3 DH	26-30	Female	Phone, Laptop	>5 years
BK 4 BOD	21-25	Female	Laptop, Tablet	>7 years
BK 5 AT	36-40	Male	Phone, Desktop	>3 years
BK 6 EC	21-25	Male	Phone, Desktop, Laptop, Tablet	>6 years
Twitter – General Group – Guardian Music (GM)				
GM 1 ML	26-30	Female	Phone, Laptop, Tablet	>8 years
GM 2 SOS	26-30	Male	Phone, Laptop	>5 years
GM 3 JM	36-40	Male	Phone, Laptop	>10 years
GM 4 TL	31-35	Male	Phone, Laptop, Tablet	>5 years
GM 5 TM	26-30	Male	Phone, Desktop, Laptop, Tablet	>5 years
GM 6 HL	41-45	Male	Phone, Laptop, Tablet	>10 years
Twitter – Musician Group – Amanda Palmer (AP)				
AP 1 KH	16-20	Female	Phone, Laptop	>5 years
AP 2 EB	26-30	Female	Phone, Desktop, Laptop	>8 years
AP 3 EMP	26-30	Male	Phone, Desktop, Laptop	>6 years
AP 4 JW	41-45	Male	Laptop, Tablet	>6 years
AP 5 SPL	26-30	Female	Phone, Desktop, Tablet	>8 years
AP 6 MK	26-30	Male	Phone, Laptop	>6 years

Table 3-15: Interview Respondent Demographics

In addition, data was collected on music consumption intensity and SNS usage intensity. Respondents were categorised based on their answers as 'active' or 'passive' users. This is presented in the following sections.

Interview Respondent Music Consumption Intensity

For music consumption intensity, users were asked a number of questions on how often they spent on music seeking or music consumption activities, as well as their music preferences for particular music genres (see Table 3-16 for an overview of the data collected). A link to the music industry was also recorded, as some users were musicians or worked currently/previously in the music industry. There were 12 users (50%) that had a link with the music industry either as musicians or through work. The remaining 12 (50%) did not have any links with the music industry.

Interestingly, the most diverse music tastes occurred in the two general music groups (Plugd Records and Guardian Music) as expected, with a larger variety of tastes expressed. Whereas with the two musician-specific groups, a more homogenous taste profile occurred, with many expressing a general interest in 'alternative' and 'diverse' musical tastes without explicitly stating examples in the same way as other respondents, who were able to identify specific alternative music genres.

Users engaged in music consumption activities for as little as one hour to just under 10 hours, with an average of five hours spent on music consumption a day – highlighting the importance of music to some of the respondents and the time they invested in it (whether seeking new music or accessing music content in their daily routine). Music intensity was ascribed to users based on (1) the time spent on music activities, (2) their self-reported engagement and participation with music seeking activities, and (3) the types of seeking activities undertaken such as browsing, exploring or searching.

Music intensity also influenced whether users were categorised as active or passive. As presented in Table 3-16, seven users are described as passive (29%) with the remaining 17 categorised as active (71%). Active respondents are users who actively engage with music seeking and music discovery. These users explored and engaged in a number of ways to discover music content. Passive respondents stated that music content often comes to them and they do not need to engage heavily in music seeking activities, but prefer to receive recommendations from their network based

on prior experiences. They have a more narrow method of engaging in music discovery (*i.e.* preferences suitable for social network site content discovery).

In general passive users (seven respondents) correlated with a low (five respondents) to medium (two respondents) music consumption intensity. While the majority of active users (17 respondents) were categorised as high intensity (13 respondents), as expected. The remaining four active respondents were labelled as medium intensity. This was due to the difference in the amount of time spent by the user and the types of behaviours they engaged in.

INTERVIEW RESPONDENT MUSIC INTENSITY					
Group	**User Type**	**Hours**	**Music Link**	**Preferences**	**Intensity**
Facebook – General Group – Plugd Records (PR)					
PR 1 DOM	Passive	<2 Hours	No	Alternative - Rock, Indie	Medium
PR 2 GM	Active	<7 Hours	Yes	Alternative - Indie; Electronic	High
PR 3 MMC	Active	<7 Hours	Yes	Electronic; Dubstep; Techno; Pop; Diverse	High
PR 4 RL	Active	<3 Hours	Yes	Alternative - Post Rock, Acoustic	High
PR 5 GS	Active	<5 Hours	Yes	Disco; House; Diverse	High
PR 5 ND	Active	<8 Hours	Yes	Dance - House, Techno; Diverse	High
Facebook – Musician Group – Bjork (BK)					
BK 1 AOD	Active	<5 Hours	Yes	Alternative - Rock, Indie; Electronic	High
BK 2 CG	Passive	<1 Hour	Yes	Jazz, Improvised Music	Medium
BK 3 DH	Passive	<1 Hour	No	Alternative, Diverse	Low
BK 4 BOD	Active	<5 Hours	Yes	Alternative, Diverse	High
BK 5 AT	Active	<10 Hrs	Yes	Alternative, Diverse	High
BK 6 EC	Active	<2 Hours	No	Alternative - Indie; Electronic	High
Twitter – General Group – Guardian Music (GM)					
GM 1 ML	Active	<2 Hours	No	Hiphop; Dance	Medium
GM 2 SOS	Active	<1 Hour	No	Alternative; Hiphop; Diverse	Medium
GM 3 JM	Active	<9 Hours	Yes	Electronic; Reggae - Dub	High
GM 4 TL	Active	<6 Hours	Yes	Electronic; Diverse	High
GM 5 TM	Passive	<1 Hour	No	Blues; Jazz; Rock; Classical	Low
GM 6 HL	Active	<8 Hours	Yes	Alternative - Indie; Experimental; Folk; Classical - Avant-Garde	High
Twitter – Musician Group – Amanda Palmer (AP)					
AP 1 KH	Active	<5 Hours	No	Alternative - Rock; Diverse	Medium
AP 2 EB	Passive	<2 Hours	No	Aternative - Hardcore Punk, Rock; Acoustic; Folk	Low
AP 3 EMP	Active	<4 Hours	No	Alternative - Rock; Blues	Medium
AP 4 JW	Active	<8 Hours	No	Alternative - Indie, Rock; Electronic; World - African	High
AP 5 SPL	Passive	<5 Hours	No	Diverse	Low
AP 6 MK	Passive	<4 Hours	No	Alternative - Rock; Pop; Diverse	Low

Table 3-16: Interview Respondent Music Intensity

A music link was recorded with 11 out of the 17 active users (65%) and with one out of the seven passive users (14%), giving a total of 12 users with a music link (half the interview respondents – the majority active users). This left 12 users with no music link, six from both the active and passive types. The only passive user who had a music link was a working musician. This respondent stated that due to the amount of musicians they were connected with via SNS, they often just relied on recommendations from them:

> ***BK2:*** *A lot of my friends on Facebook are musicians. They would be interested in the music I am interested in and also would be quite adventurous in finding music, I don't think I am actually, I'm a bit lazy, whereas I have some friends who are constantly seeking new bands and new music, and even just YouTube clips of particular musicians or whatever and they are putting them up all the time and I think that's great.*

It is apparent from the data that the majority of people who have a link to the music industry are also involved more heavily in music discovery. When no link is evident the users are more likely to be passive and low/medium intensity. Of the active users with no music link, four out of six were also categorised as medium intensity (with all the other active users labelled high intensity). Also noteworthy is the majority of users with a music link were from the two Facebook case groups (83% from the general music group and 67% from the musician specific group); the other three respondents with a music link were a part of the general music group in Twitter (50%).

The general music group – where users are more likely to have broader musical tastes – were the most likely to be active, high intensity users with a music link (67%). Thus, revealing their interest in following general music news and broader music tastes. This is in contrast with the musician-specific group, which had the majority of the passive users from the study (72%), who were more likely to be passive, low-to-medium intensity with no music links, aligning them as specific music fans not engaged in broader music interests. The musician-specific group contained slightly more active users (58%) versus passive users (42%), but were more likely than the general group to have passive users with only 17% of all passive users from the general group.

Interview Respondent SNS Usage Intensity

Social network site intensity outlines the general usage of SNS in a user's daily practices, not specific to music consumption. The interview SNS intensity data has been divided into two tables (Table 3-17 and Table 3-18) because of additional measures unique to each case site. The constructs common to both SNS include: (1) user type (active/passive), (2) hours spent on SNS per day, (3) visit type (once off versus multiple visits), (4) number of connections, (5) year profile was created, (6) total years on SNS, (7) SNS intensity, and finally (8) number range of social network sites used including case site.

Facebook-specific constructs included four additional items: number of likes, number of music likes, number of groups joined, and first wall post. Twitter-specific constructs included two additional items: number of profiles a user is following (as opposed to followers/connections included above) and the number of total tweets posted. Some of this data was collected after the interview was conducted - extracted from the user's profile page. Where data is 'unknown', a profile page was not disclosed to the researcher or has since been deleted.

Users were categorised as active or passive based on this data. As presented in Table 3-17 and Table 3-18, ten users are described as passive (42%) with the remaining 14 categorised as active (58%). Like music intensity, active SNS respondents are users who actively engaged with their social network. These users participated, contributed, and actively engaged with other users and with their social network practices. Passive respondents were more likely to passively browse and did not participate and engage as much as their counterparts. They were receptive to content in their timeline/activity feed but did not explore or participate in the same way as active users.

The data gathered on the amount of time users spent in the case site ranges from brief visits of five-to-fifteen minutes up to about four hours. Nevertheless, the most common time ranges are: brief visits (eight respondents - 33%), less than one hour (seven respondents - 29%), and less than two hours (seven respondents - 29%). The remaining two respondents estimated from three to four hours of time spent on the site.

FACEBOOK INTERVIEW PROFILE DETAILS AND SNS INTENSITY												
User Group	**User Type**	**Hours Spent**	**Visit Type**	**No. of Friends**	**Total Likes**	**Music Likes**	**Joined Groups**	**First Wall Post**	**Date Joined**	**Years Joined**	**SNS Intensity**	**SNS Used**
Facebook – General Group – Plugd Records (PR)												
PR 1 DOM	Passive	<1 Hour	Multiple	<450	51	10	5	Jul 2007	Jun 2007	6	Low	Several (>2)
PR 2 GM	Active	<1 Hour	Multiple (A.D.)	<700	758	0	9	unknown	2008 est.	5	High	Multiple (>5)
PR 3 MMC	Active	Brief Visit	Multiple (A.D.)	<700	657	83	2	Mar 2009	Mar 2009	4	High	Several (>2)
PR 4 RL	Active	Brief Visit	Multiple (A.D.)	<3,000	2,264	566	50	May 2007	Apr 2007	6	High	Multiple (>5)
PR 5 GS	Active	<2 Hours	Multiple	<570	385	170	16	unknown	Jan 2008	5	High	Single
PR 5 ND	Active	<4 Hours	Multiple	<410	unknown	-	-	unknown	unknown	-	High	Several (>2)
Facebook – Musician Group – Bjork (BK)												
BK 1 AOD	Passive	<2 Hours	One Visit	<180	221	89	0	Jul 2009	Apr 2009	4	Low	Several (>2)
BK 2 CG	Passive	<1 Hour	Multiple	<850	421	122	11	Mar 2008	Dec 2006	7	Low	Single
BK 3 DH	Passive	Brief Visit	Multiple	<250	302	122	3	Aug 2007	Feb 2007	6	Low	Single
BK 4 BOD	Active	Brief Visit	Multiple	<500	641	183	6	unknown	Dec 2007	6	Medium	Several (>2)
BK 5 AT	Active	Brief Visit	Multiple (A.D.)	<1,600	1,136	633	26	Jan 2010	Jan 2010	3	High	Several (>2)
BK 6 EC	Active	<1 Hour	Multiple (A.D.)	<300	209	116	1	Mar 2009	Mar 2009	4	High	Single

Table 3-17: Facebook Interview Respondent Profile Details and SNS Intensity

More often than not all users were taking brief visits throughout the day to the SNS, however some users were able to specifically state whether it was for an accumulation of an hour or two a day. Only three respondents (13%) stated that they visited the site once a day for a certain amount of time. This included one respondent from the Facebook musician-specific group and two respondents from the Twitter musician-specific group. All of these single visits were made by users categorised as passive SNS users (three out of the 10 passive users). Some users also stated that though they made multiple visits throughout the day, they were logged into the sites all day long, this corresponded with 11 respondents and is represented in Table 3-17 and Table 3-18 as follows: Multiple (AD), with AD representing 'all day'. The majority of the users who were logged in all day (nine respondents out of 11) were active users; only two passive users also mentioned being logged in all day.

Users in some cases stated that they had joined more than just the research study case site. The majority of users (14 respondents – 58%) stated that they use several social network sites ranging from two to five different sites, with another four respondents using more than five SNS. In contrast five respondents stated they were joined solely to the research case site, four from the Facebook groups and one from the Twitter general group. There did not seem to be any significant difference between passive and active users and the number of SNS joined.

The number of social connections a user had was also recorded. This figure ranged from as few as 20 connections (AP 3) to just under 19,000 connections (GM 3), a difference of 18,980 followers. Both of these extremes are from the two Twitter groups. It is evident there is a wide range of users in the Twitter groups. In contrast the Facebook groups had less extreme ranges between the users, with the lowest number of connections under 180 (BK 1) and the highest just under 3,000 (PR 4), a difference of 2,820.

With regards to Twitter, even though there was very little range between the years that users joined the site, there is a marked difference between the activity counts between the users in each group. For instance four respondents from the general music group joined Twitter four years ago. But there is a significant range between the amount of followers, the number of tweets, and the amount of pages they have followed in that time.

TWITTER RESPONDENT PROFILE DETAILS AND SNS INTENSITY											
User Group	**User Type**	**Hours Spent**	**Visit Type**	**No. of Followers**	**No. Following**	**No. of Tweets**	**First Tweet**	**Date Joined**	**Years Joined**	**SNS Intensity**	**SNS Used**
Twitter – General Group – Guardian Music (GM)											
GM 1 ML	Passive	<1 Hour	Multiple (A.D.)	<180	<120	<1,600	Jan 2010	Dec 2009	3	Medium	Several (>2)
GM 2 SOS	Active	<2 Hours	Multiple (A.D.)	<340	<860	<3,000	Oct 2010	Sep 2010	3	Medium	Several (>2)
GM 3 JM	Active	Brief Visit	Multiple (A.D.)	<19,000	<3,200	<51,000	Jan 2009	Jan 2009	4	High	Several (>2)
GM 4 TL	Active	<1 Hour	Multiple	<630	<330	<3,400	Nov 2008	Nov 2008	4	High	Several (>2)
GM 5 TM	Active	<3 Hours	Multiple (A.D.)	<500	<1,300	<18,000	Sep 2009	Mar 2009	4	High	Single
GM 6 HL	Active	Brief Visit	Multiple (A.D.)	<660	<1,300	<9,000	Oct 2009	Oct 2009	4	High	Multiple (>5)
Twitter – Musician Group – Amanda Palmer (AP)											
AP 1 KH	Active	<2 Hours	Multiple	<200	<180	<2,800	Nov 2010	Feb 2010	3	Medium	Multiple (>5)
AP 2 EB	Passive	Brief Visit	One Visit	<50	unknown	-	unknown	unknown	-	Low	Several (>2)
AP 3 EMP	Passive	<2 Hours	One Visit	<20	<130	<200	Sep 2012	Apr 2010	3	Low	Several (>2)
AP 4 JW	Passive	<2 Hours	Multiple	<180	<320	<640	Aug 2009	Dec 2007	5	Medium	Several (>2)
AP 5 SPL	Passive	<1 Hour	Multiple (A.D.)	<50	<60	<330	Feb 2009	Jan 2009	4	Low	Several (>2)
AP 6 MK	Passive	<2 Hours	Multiple	<130	<120	<330	Nov 2011	Sep 2011	2	Low	Several (>2)

Table 3-18: Twitter Interview Respondent Profile Details and SNS Intensity

These four respondents differ from as little as 500 followers (GM 5) to 19,000 followers (GM 3) and 3,400 tweets (GM 5) to 51,000 tweets (GM 3), all within the same four years of time. As the majority of the general music group were defined as active users (five out of six respondents), their Twitter counts across all of the variables are far larger than the more passive musician group (five out of six respondents).

It is clear that along with the interview data and a user's self-reported intensity levels – based on contributions and participation – the counts recorded in Table 3-18 are an accurate indicator of how active a user is and how intensively a user engages with Twitter (compared to years joined). In the same vein, Facebook counts are less apparent in displaying whether a user is a high intensity active user. Though respondents have varying years in which they joined Facebook, without a total number of posts since joining, like Twitter, it is not easily discernible how active a user is.

There is a small correlation between the number of connections and the number of pages "liked" with a user's intensity level, but it is not as clear-cut in Facebook. Low intensity passive users had counts ranging from 180 friends (BK 1) to 850 friends (BK 2), as well as a difference in the number of liked pages, from 51 (PR 1) to 421 (BK 2). While active users' ranges were much higher at 300 (BK 6) to 3,000 (PR 4) friends, and 209 (BK 6) to 2264 (PR 4) liked pages.

As presented in Table 3-19 the counts improved slightly across the averages between passive and active users, but qualitative data is still necessary in assessing whether users are high intensity active users, as other factors may influence these counts. For example, one passive low-intensity user (BK 2) had a large number of connections and activity counts but did not actively engage in the environment. She noted that because she was a working musician she had many connections on the network including friends, followers, and other musicians but self-reported a lack of engagement and hence was categorised as passive.

FACEBOOK AVERAGES COMPARISON		
User Counts	**Passive Users**	**Active Users**
No. of Friends	432	972
No. of Liked Pages	248	864

Table 3-19: Averages of Facebook Counts

3.3.3 Data Analysis

The strategy for data analysis included a number of steps based on content analysis techniques. Content analysis enables a researcher to make replicable and valid inferences from text-based documents about the contexts of their use (Krippendorff, 2004, p. 18). According to Krippendorff (2004), when undertaking content analysis it is necessary to first address six questions, which have been outlined in Table 3-20. These questions have been applied to both phases of data analysis in the table.

CONTENT ANALYSIS APPLICATION			
	Question	**System Inventory**	**Interview**
1	*Which data are analysed?*	User guides and help documentation	Interview transcripts
2	*How are they defined?*	User aids for system navigation and usage	Semi-structured interviews with SNS users and music consumers from Twitter and Facebook
3	*What is the environment from which they are drawn?*	Three social network sites: Facebook, YouTube, and Twitter	Face-to-face, Skype, e-mail questionnaire
4	*What is the context relative to which the data are analysed?*	Data is analysed using the generic SNS affordances from the literature analysis	Data is analysed in relation to user characteristics, tasks characteristics and technology characteristics to fully detail each element and their interplay
5	*What are the boundaries of the analysis?*	Examining the features and functionality of the system in terms of the generic SNS affordances	User activities are analysed in the context of the three music consumption tasks, further analysis is bounded by the system inventory findings
6	*What is the target of the inferences?*	To create a system inventory of technical SNS features and to validate/update the generic SNS affordances	To describe user activities and affordances of SNS for the consumption of cultural goods

Table 3-20: Content Analysis Application (Source: Krippendorff, 2004)

Data coding allowed for accurate analysis to be made and reduced large amounts of data into a smaller number of analytic units, it is an integrated schema for understanding local incidents and interactions, and simplifies and focuses the meaningful characteristics of the data (Hair *et al.*, 2007; Eisenhardt, 1989; Miles and Huberman, 1984). By using data coding techniques, the main themes in the data were identified, facilitating further theme comparison and pattern matching (*cf.* Hair *et al.*, 2007; Eisenhardt, 1989; Miles and Huberman, 1984).

Data was selected, focused, simplified, abstracted, and transformed during both phases of data analysis, this was done using the following steps (Miles and Huberman, 1984):

- text segmentation into manageable chunks,
- content analysis which includes identifying the main themes in the data and keeping track of emerging themes,
- creation and assignment of codes to each theme,
- organising the responses and data under the main themes,
- using the themes and responses to show support or contradiction of argument.

The objective of this analysis was to identify, examine, compare and interpret the patterns and themes within the system inventory data and the interview data (*cf.* Hair *et al.*, 2007). In addition to data coding, within-case and cross-case analysis was conducted. Within-case analysis typically involves detailed case study write-ups, which allows for unique patterns of each case to emerge, providing a rich familiarity with each case and as a result accelerating cross-case comparison (Eisenhardt, 1989). Case-comparison consisted of both within-case analysis and cross-case analysis whereby firstly, an adequate explanation was constructed for each case singly, before establishing cross-case patterns (*cf.* Yin, 1981). It is necessary to "preserve a chain of evidence as each analytic step is conducted" (Yin, 1981, p. 63). A chain of evidence "consists of the explicit citation of particular pieces of evidence, as one shifts from data collection to within-case analysis to cross-case analysis and to overall findings and conclusions" (Yin, 1981, p. 63). Thus, chains of evidence were implemented in this study, documenting the evidence for each case. For more detail on the implementation of data analysis techniques for both phases of data collection see Section 3.3.3.1 for the system inventory analysis and Section 3.3.3.2 for the interview data analysis.

3.3.3.1 Phase One Data Analysis: System Inventory

The use of data coding in this study enabled accurate analysis of the SNS documentation by reducing large amounts of data into themes based on the generic SNS affordances (*cf.* Eisenhardt, 1989). Data reduction where raw data is selected, focused, simplified, abstracted, and transformed was employed during content analysis (*cf.* Miles and Huberman, 1984). The user/help documentation of the three SNS were reviewed in order to document system features and their instantiations in the context of the SNS affordances. Key themes were assigned to each feature and the social and content affordances were used to categorise and organise the data (*cf.* Hair *et al.*, 2007; Eisenhardt, 1989; Miles and Huberman, 1984):

Social Affordances	**Content Affordances**
▪ Profile Building (PB) ▪ Social Connectivity (SC) ▪ Social Interactivity (SI)	▪ Content Discovery (CD) ▪ Content Sharing (CS) ▪ Content Aggregation (CA)

The strategy for collecting and analysing the inventory data included the following steps:

1. Examine system documentation for intended functions and feature lists. Step through:
    a. help guides
    b. user guides
2. Code data under the following headings (see Table 3-21 for sample data table):
    - Document Type and Main Section
    - Section Heading
    - Feature Name
    - Feature Description
    - Affordance Type
    - Researcher Comments

TWITTER INVESTIGATION					
Section	**Heading**	**Feature**	**Description**	**Affordances**	**Comments**
Help Centre: Welcome to Twitter Support	The Twitter Glossary	#	The # symbol is used to mark keywords or topics in a Tweet. Was created organically by Twitter users.	(4) Content Discovery (5) Content Sharing (6) Content Aggregation	Groups topics or keywords to search
		@	The @ sign is used to call out usernames in Tweets, like this: Hello @Twitter! When a username is preceded by the @ sign, it becomes a link to a Twitter profile.	(3) Social Interactivity (5) Content Sharing (6) Content Aggregation	Links posts directly to another user – form of open communication – direct and asynchronous
		Connections	The Applications tab in your Twitter settings shows all third party websites and applications to which you've granted access your public Twitter profile. Revoke access at any time.	(2) Profile Building	Manage linking of third party applications
		Direct Message	Also called a DM and most recently called simply a "message," these Tweets are private between only the sender and recipient.	(3) Social Interactivity (5) Content Sharing	Private messaging – direct and asynchronous
		Email Notifications	Preferences set by Twitter users to regulate notifications via email about events on your account, such as new followers and new direct messages.	(2) Profile Building	User updates about profile activity
		Favorite	To favorite a Tweet means to mark it as one of your favorites by clicking the yellow star next to the message.	(3) Social Interactivity (6) Content Aggregation	Aggregate favourite tweets into a list to view by users of followers

Table 3-21: System Inventory Sample Data Table

3. Extract relevant features from coded data and categorise vis-a-vis social and content affordance type (see Table 3-22 for example structure of analysis).

Twitter Features	SC	PB	SI	CD	CS	CA	Other
#Hashtags				x	x	x	
@Mention			x	x	x	x	
@Reply			x	x	x	x	
@Twittersuggests				x		x	
Automated Tweets			x		x		
Direct Message			x		x		
Email Notifications		x					
Facebook Application	x	x	x		x		

Table 3-22: System Inventory Sample Table: Affordance Analysis

4. Undertake a feature and theme comparison across the three SNS (see Table 3-23 for sample table of SNS feature comparison).

Content Discovery			Content Sharing			Content Aggregation		
T	Y	F	T	Y	F	T	Y	F
#Hashtags	Suggested Videos	People search	#Hashtags	Bulletin Posts	Posts	#Hashtags	Suggested Videos	Friendship pages
@Twittersuggets	Rent a film	Search filters	@Reply	Share/embed	Community pages	Automated Tweets	Browse	Posts
Automated Tweets	Search	Search on Bing	Automated Tweets	Auto-share	Commenting	Favorite	Charts	Community pages
Browse Interests	Browse	Community pages	Facebook Application	Embed Content	Groups	Home Timeline Timeline	Topics	Related Posts

Table 3-23: System Inventory Sample Table: SNS Feature Comparison

5. Apply hierarchies to system features – identifying the key features and their sub-features, example:
    a. Key feature = profile
    b. Profile sub-features = profile picture; biography; activities and interests; real name; username; profile information; *etc.*
6. Investigate the key feature categorisation across all SNS to identify similarities and differences (see Table 3-24 and Table 3-25).

Features	SNS	SC	PB	SI	CD	CS	CA
Tagging	Twitter	x			x	x	x
	YouTube				x		x
	Facebook	x	x	x		x	
Social Connections	Twitter	x					x
	YouTube	x					x
	Facebook	x					x
Profile	Twitter		x				
	YouTube		x				
	Facebook		x				x

Table 3-24: System Inventory Sample Table: Key Feature Analysis

Tagging Feature Comparison		
Twitter Profile	**YouTube** Channel	**Facebook** Profile
(a) Tags placed in posts – links people to content (b) Aggregates tagged topics into a list of content via Search (c) Saves searches based on tagged topics (visible from homepage)	(b) Aggregates tagged topics into a list of content via Search	(a) Tags placed in posts – links people to content (d) Access/view tagged content via connections (friendships)

Table 3-25: System Inventory Sample Table: Tagging Feature Comparison

7. Conduct system analysis based on findings and explore system functionality to confirm results and refine key feature categorisations.

The system inventory resulted in 18 technical features[3] with corresponding functionalities and instantiations. These features are common to all three SNS and were aligned with the social and content affordances in the analysis.

3.3.3.2 Phase Two Data Analysis: Interviews

The interviews were also analysed using data coding techniques, useful for reducing large amounts of data into themes and identifying patterns and relationships (*cf.* Hair *et al.*, 2007; Eisenhardt, 1989; Miles and Huberman, 1984). The interviews were transcribed and then coded using NVivo Qualitative Data Analysis (QDA) software. The interview data was categorised and coded under the following headings:

- Setting (case site and case group)
- User demographics
- General music strategy
- Music consumption intensity

[3] Twenty features were originally defined but this was refined after phase two of data collection and analysis.

- SNS use intensity
- Activities: information seeking (search and explore); information encountering (discover and sample); information sharing (interact and share)
- Affordances: social affordances; content affordances

A sample of this initial categorisation and data coding is displayed in Table 3-26 (for the full list see Appendix A-2).

INITIAL DATA CODING OF INTERVIEW TRANSCRIPTS	
Category	**Code**
SETTING	
Case Site	FACEBOOK
	TWITTER
Case Group	FACEBOOK-GENERAL-PLUGD
	FACEBOOK-MUSICIAN-BJORK
	TWITTER-GENERAL-GUARDIAN
	TWITTER-MUSICIAN-PALMER
USER	
Demographics	AGE
	GENDER
	FORMAT OF INTERVIEW
	LOCATION
	SNS USE YEARS
	FREQUENCY
	DEVICES
	COMPUTER SELF-EFFICACY

Table 3-26: Interview Sample Table: Initial Data Coding of Transcripts

Having coded in NVivo, reports were created based on each 'node'. Figure 3-15 displays an excerpt of these reports, specifically for the sampling code as a part of the information encountering category.

Name: *Information Encountering: Sampling*

<Internals\\Interviews\\AP1 KH - § 2 references coded [3.19% Coverage]

Reference 1 - 1.45% Coverage

A lot of times I'll be on YouTube listening to a song or watching a music video and I'll just go on what I call a "clicking spree" and just keep clicking on related videos.

Reference 2 - 1.74% Coverage

That has also been an effective way for me to find songs because people will post something like, "Listening to Bottomfeeder by Amanda Palmer!" and then I end up looking up that song and listening to it too.

Figure 3-15: Interview Sample Excerpt: NVivo Coding Report

Following the creation and analysis of these reposts three overarching themes were abstracted with which to further analyse the data: (1) active seeking, (2) passive encountering, and (2) content sharing. The following table (Table 3-27) aggregated all active seeking quotations and documented the motivation and outcome related to when a user searches for connections to follow.

ACTIVE SEEKING AFFORDANCE A: CONNECTION SEARCH AND FOLLOW		
Twitter		
Comments	**Motivation**	**Outcome**
AP1: *There have been many times where someone will suggest an artist to me and I'll go look them up on Twitter and start following them. Usually this is the first step I take to learn more about that individual or band.*	- Learn more about a band	- Added to timeline
AP4: *Just looking for musicians or bands that I like, and just following them or seeing if they have anything worth seeing on Twitter. Specifically, there is a guy called "Rob the Anonymous" who was the singer of the band called "The Dead Mountain" out of Philadelphia, I actually read a blog post, on a site that said he was on Twitter and I specifically went there to find him on Twitter.*	- Learn more about a band - Finding bands already known	- Added to timeline - Browse content
GM1: *I found a lot of bands that I have become a fan of and got into researching them from Twitter cause a lot of the people I follow would be musicians and you find that they post about other musicians or news or new bands. So you discover them on Twitter, you follow the band on Twitter, you realise they are interesting to you and then they post on Twitter when their gigs are when their albums are coming out, about their production…*	- Learn more about a band - Based on existing tastes	- Added to Timeline - Discovering new music

Table 3-27: Sample Interview Data Analysis Table

These motivations and outcomes were grouped into themes for each affordance and compared across each case site resulting in chains of evidence tables as displayed in Table 3-28.

CHAIN OF EVIDENCE: AFFORDANCE F- CREATING AND SHARING CONTENT	
Twitter	**Facebook**
Experiential (while listening to music)	
AP1: *There are plenty of times I have tweeted when I'm listening to a specific song or have provided a link to some sort of awesome music video that I think my followers would like.*	***BK6:*** *YouTube. Always YouTube, so if I was listening to a song on SoundCloud or something like that or I could use SoundCloud as well…but I just copy and paste the link in. Post it on my wall.*
Sharing based on tastes and for social reasons (someone might like this)	
AP2: *I send videos and recommendations to friends using Twitter (or Facebook) pretty often when I think they may like the music. Lately I sent Jay Malinowski's videos to a friend who, although she's into hip hop, she appreciates acoustic music.* **AP6:** *I think it is important to show my tastes with others, but not always my opinions. When it comes to music I would be more comfortable talking about a piece of music I enjoyed rather...*	**BK1:** *Either by posting a music video on Facebook, even on their page or just my own page. Or actively giving it to friends around me.* **BK1:** *I like sharing music. It's important for people to share music. It builds relationships with people.* **BK1:** *Facebook is good because it allows you to interact with your friends, and with a music blog, a music site, or a shop and they can post and give you ideas for new music, and you can give your friends new music. So it's a good way of finding new…*

Table 3-28: Interview Sample Table: Chains of Analysis

Once each of these chains of evidence tables was assembled, they were analysed to compare activity prevalence based on the case site, the case group, and the user types (see Chapter 5 Section 5 5.5 for this).

Phase two of data analysis resulted in four user classifications, three user activity process models for active seeking, passive encountering, and content sharing, and finally seven affordances and corresponding affordance models for the consumption of music using SNS.

3.4 Chapter Conclusion

This chapter presented the critical realist stance of the researcher, which led to a post-positivist perspective. Based on this and the research objective and questions of the study, qualitative case study research in two phases of data collection was proposed. Using affordances as the lens of the study put focus on three elements important in applying affordances to the research context: technology, task, and user characteristics and their interplay. The first phase of data collection addressed the technology aspect of the affordances application by detailing the technical features of three social network sites. This phase addressed research question one and resulted in 18 technical features, functionalities, and instantiations for general SNS.

The user and task characteristics of the affordance application were addressed in the second phase of data collection, including the interplay of both with the technology. This phase answered research question two and three and consisted of 24 semi-structured interviews within two case sites (Facebook and Twitter). This phase resulted in four user classifications (based on music consumption intensity and SNS usage intensity), three user activity process models (active seeking, passive encountering, and content sharing), and finally seven affordances for the consumption of music using social network sites. The system inventory findings are presented in Chapter 4 and the interview findings are presented in Chapter 5.

CHAPTER 4
FINDINGS PART 1: SYSTEM INVENTORY

4.1 Introduction

This chapter presents the findings from phase one of data collection, namely the system inventory (described in Sections 3.3.2.1 and 3.3.3.1). The purpose of the system inventory was to address research question one highlighted grey in Table 4-1.

RESEARCH QUESTIONS		METHOD	OUTCOME
1	*What are the technical features of SNS?*	**Phase 1:** System Inventory	– System inventory of 18 technical features aligned with the generic SNS affordances
2	*What activities do users undertake when consuming cultural goods in SNS?*	**Phase 2:** Interviews	– Four active/passive user types – Three user activity process models
3	*What are the affordances of SNS for the consumption of cultural goods?*		– Seven affordances for the consumption of cultural goods using SNS – Theoretical research model with 14 propositions of affordance and activity relationships and dependencies

Table 4-1: Research Questions and Study Outcomes

To address the research question and document the technical features of social network sites, a system inventory was conducted on selected social network sites to produce a list of technical features, functionalities and instantiations. The three social network sites chosen were Facebook, YouTube, and Twitter. The system inventory was implemented in two parts:

1. *Documentation Analysis*: content analysis of system help guides for end-users with a focus on technical features and functionality
2. *System Analysis*: examination of live system features to validate data in documentation analysis and to further explore features of the system.

The documentation analysis resulted in three feature analysis tables for each case site (see Appendix B-1). The feature analysis tables provide a list of each feature within the SNS, a description of the feature, and which affordance was assigned. Based on this analysis a feature comparison across the SNS affordances and case sites was conducted. The findings are structured based on the two types of generic SNS

affordances described in the Section 2.6: 'Social Affordances' (2.6.1) and 'Content Affordances' (2.6.2).

The analysis resulted in twenty technical features with a collection of corresponding SNS instantiations. A system inventory is presented for each of the social and content affordances (Sections 4.2 and 4.3). The features are compared across all three SNS exploring case similarities and differences. A system inventory for general SNS is provided in Section 4.4 along with the twenty technical features[4], a description of their functionality and corresponding instantiations.

4.2 Social Affordance System Inventory

This section presents the findings related to the social affordances of the three case sites. Social affordances include social connectivity, social interactivity, and profile building. There are twelve technical features assigned to the social affordances with a list of corresponding instantiations for each case site. Table 4-2 presents an overview of the social affordance features and their instantiations.

4.2.1 Profile Building Features

Profile building affords user to manage and organise their personal profile pages. The profile building affordance has five technical features: (1) the ability to manage/edit a profile, (2) profile updates, (3) location tagging, (4) external profile management, and (5) mobile application. The system inventory for profile building is displayed in Table 4-3. Users employ the profile feature as a representation of themselves, enabling the disclosure of personal information and the presentation of identity and image.

In all three sites, profile building enables a user to manage their profiles through features that facilitate editing personal information and further control through external sources and mobile applications. What is significant about the selected SNS is the ability to link profiles to external sources (like other social media sites).

[4] This is later abstracted to 18 technical features, due to an update of the content discovery affordance definition. This is as a result of phase two of data collection and analysis. Originally it was defined as the ability to discover content in a social network system. But during the process of analysis (for phase two) it became clear that because the definition encompassed content aggregation and social interactivity, it was unnecessary as a construct itself but required a more bounded definition. The new definition for content discovery is the ability to search or browse for specific content/pages within the environment. As a result, only two technical features are assigned to the content discovery affordance in Chapter 6.

FEATURES	TWITTER	YOUTUBE	FACEBOOK
Profile Building			
Manage/Edit Profile	– Avatar – Bio – Design – Handle/Real Name – Profile Picture	– Channels – Homepage – Hometown/Location – Insight – Subscriptions	– Add Applications – Comments/Messages/Posts/Notes – Join Pages/Groups/Networks – Profile Photo/Information/Content – Like/Tag/Places/Events
Profile Updates	– Email Notifications – RSS Feed/OAuth	– Email Notifications – YouTube Newsletter	– Email Notifications – Internal Notifications
Location Tagging	– Geotagging/Geolocation	– Video Location	– Places
External Profile Building	– @Anywhere – Buttons/Widgets – Connections (applications)	– Auto-share – Embed/Share Content – YouTube Direct/Facebook/Twitter	– Instant Personalisation – Linking to Twitter/External Login – Social Plugins
Mobile Application	– Mobile Application – Mobile: Short Code/Sleep Time	– Mobile Application	– Facebook Mobile Texts – Mobile Applications
Social Connectivity			
Connecting	– Follow	– Add Friend – Subscribe	– Add Friend – Like Pages/Community Pages
Connection Search/ Suggestions	– Browse Interests – Find Friends – Recommendations – Search	– Recommended Channels – Search Channels	– Connection Search – Friend Finder – People you may know – Recommended Pages
Connection Lists/Groups	– Lists	-	– Join Groups/Networks – Friend Lists
Social Interactivity			
Asynchronous Communication	– @Mention/@Reply – Direct Message – Tweet/Retweet – Automated Tweet	– Bulletin Posts/Channel Comment – Video Posts – Video Comment – On-site messaging system	– Comments/Posts/Notes – Messages (Text/Video) – Pages/Community Pages/Groups – Like/Tag/Places/Events
Synchronous Communication	-	-	– Chat/Group Chat/Video calling
Rating/Liking	– Favourite	– Favourite – Like/Dislike	– Like
External Interactions	– Facebook Application – Share/Link (External)	– Auto-share – Share/Embed Content	– Share/Link (External)

Table 4-2: Social Affordance System Inventory

A user creates an online identity through their chosen SNS and applies this persona to other online activity. Profile building enables a user to control the information linked to a profile and who has access to it. A profile will typically include: a profile picture, username, location, general interests, a list of connections, and additional personal information. Some SNS profiles can be enhanced with multimedia content: videos, music players, and photos. Modules or applications can also be used to improve a profile. Applications include games, music, photos, presentations, *etc*.

PROFILE BUILDING SYSTEM INVETORY			
Features	**Twitter**	**YouTube**	**Facebook**
Manage Profile	– Avatar – Bio – Blocking – Design – Handle – Profile – Profile Picture – Real Name	– Channels – Homepage – Hometown/ Location – Insight – Private video sharing – Subscriptions	– Applications – Community pages – Filter Newsfeed – Friend Lists – Friends box – Homepage – Like – Notes – Pages – Profile Information – Profile picture – Share/Link (internal) – Status updates – Tagging – Username
Updates	– Email Notifications – RSS Feed	– Email Notifications – YouTube Newsletter	– Email Notifications – Notifications
Location	– Geotagging/ Geolocation	– Video Location	– Places
External	– @Anywhere – Buttons – Connections (applications) – Facebook Application – Third Party Applications – Widgets	– Auto-share – Embed Content – Share/embed – YouTube Direct – YouTube Facebook – YouTube Twitter	– Instant Personalisation – Linking to Twitter – Login with Facebook (external website) – Share/Link (external) – Social plugins
Mobile	– Mobile Application – Mobile: Short Code – Mobile: Sleep Time	– Mobile Application	– Facebook Mobile Texts – Mobile Applications

Table 4-3: Profile Building System Inventory

Profile Building Case Comparison

The role of the profile varies across the three SNS. Twitter has the most basic profile feature. It consists of a few descriptors and a timeline of chronological tweets. The profile in Facebook enables semantic links to be formed between a user and their interests; 'liking' is an important profile building feature. In both Twitter and YouTube the profile is less important than the content that a user shares, whereas Facebook emphasises the profile as a focal point for the user. In all three, increased self-disclosure results in a richer environment for a network, *i.e.* the more metadata, the more accessible relevant content is. User contributions are extremely important to maintaining an image and online identity. Thus, the profile is a representation of a user and their interests. Connections or potential connections can view another user's profile. There are distinctive differences across the three SNS investigated and the role of the profile. Following are the keywords reflecting the profile feature in each SNS:

- Avatar (Twitter)
- Bio (Twitter)
- Username (Twitter, YouTube, Facebook)
- Profile (Twitter, YouTube, Facebook)
- Profile Picture (Twitter, YouTube, Facebook)
- Real Name (Twitter)
- Channels (YouTube)
- Profile Information (Facebook)
- Activities and Interests (Facebook)
- Birthdays (Facebook)

The Twitter profile page displays relevant information about a user. The profile presents the profile picture, real name, username, and user information (short 'bio') – this information is positioned above a section that contains all the users: 'Tweets', 'Favourites', 'Following', 'Followers', and 'Lists' – for example, clicking on the 'Tweets' sections will display a chronological list of tweets made by that user. Depending on privacy settings, a user may also have a section on their personal profile named 'Requests', which displays any people requesting to follow the user's tweets (if they have protected their tweets in the privacy section). Furthermore, the

counts associated with a user's profile are included, such as number of tweets, number of people followed by user, number of followers, and number of inclusions in lists. When a user is logged in and views another profile, the shared connections are displayed on the right, above a recommendation to other similar profiles. This profile enables users to view other people's information and tweets, whether they share a connection or not. A user's Twitter profile can be personalised using external websites that offer a number of different background pictures and displays.

YouTube enable users to create channels. Within these channel pages there is a profile section with user information. This section is a mixture of user information and statistical data. The default profile includes a profile picture, username, real name, channel views, total uploads, age, joined date, latest activity, subscribers, and country. Other items that can be included by the user are: channel description, website, interests, music, books, *etc*. Though this section is labelled profile, the entire channel functions as the profile and can be personalised by the user with modules and backgrounds. Modules that are placed on the channel page include: videos, other channels, subscriptions, subscribers, friends, channel comments, event dates, recent activity, and moderator.

Facebook in comparison with Twitter and YouTube has a more complex profile feature with the ability to add more information and content. A profile may appear differently to various people, based on the privacy settings of the user. The profile described here is one with no privacy settings or one based on a mutual connection. The profile includes the profile picture, real name and some general information including: relationship status, date of birth, work information, education information, current location, hometown, and gender. A slideshow of five of the latest chosen pictures are displayed like a banner above the wall section. The profile page displays a user's wall where both the user and other connections have posted messages including: status updates, photos, links, videos and/or questions. The wall posts are in chronological order. The profile also displays the user's friend lists and other profile section options. These sections include: wall, information, photos, notes, and friends. The information section includes content including: education and work, philosophy, arts and entertainment, activities and interests, basic information, and contact information. The photo section shows all the user's albums (photos and videos) and a list of photos and videos the user has been tagged in. The notes

sections displays a list of all the notes a user has written, and the friends section is a list of all connections. When viewing a friend's profile, the relationship is also displayed on the profile page, with some of the most recent activity between the two users listed, with the option of visiting the friendship page which is generated based entirely on the two connections' past interactions and relationship. The Facebook profile cannot be personalised by the user with regards to the display and background of the page, unlike the other two sites – each Facebook profile is uniform across the network.

4.2.2 Social Connectivity Features

Social connectivity refers to the ability to connect with other users in the network. Connectivity in this context ranges from direct connections between users, connections through content, pages, groups, *etc.*, and the ability to find connections and control these relationships. The findings reveal three associated technical features: (1) connecting, (2) connection search/suggestions, and (3) connection lists/groups. The system inventory for social connectivity is displayed in Table 4-4.

SOCIAL CONNECTIVITY SYSTEM INVETORY			
Features	**Twitter**	**YouTube**	**Facebook**
Connect	– Follow	– Add Friend – Subscribe	– Add Friend – Join Groups – Join Networks – Like – Like Community Pages – Like Pages
Search/ Suggestions	– Browse Interests – Find Friends – Follow Friday – Recommendations – Search	– Recommended Channels – Search Channels	– Connection Search – Friend Finder – People you may know – Recommended Pages
Lists	– Lists	-	– Friend Lists

Table 4-4: Social Connectivity System Inventory

The social connectivity features in an SNS involve the different ways of creating ties within the network between users. These connections are an extremely important aspect of a social network, as they enable users to access the content and activity of others. Without a connection to others in the network, there is limited value in having a profile.

Social Connectivity Case Comparison

The three SNS enable particular connection types. With direct connections in Twitter via 'following' and 'followers' and indirect connections through the use of lists. Facebook and YouTube enable both forms of connections, reciprocal and following relationships. This is evident in Facebook with friends (reciprocal), liked pages (following), groups (indirect). YouTube enables both – subscriptions (following) and friends (reciprocal) – but does not require social connectivity and is therefore distinct from the other two SNS. Following are the keywords reflecting social connection features in each SNS:

- Followers, Following, Lists (Twitter)
- Friends, Groups, Liked Pages (Facebook)
- Subscriptions, Friends (YouTube)

In Facebook the main type of connection enabled is the reciprocal relationship, *i.e.* you must accept a 'friend' request. This relationship usually signifies a known connection. Facebook is automatically a private personal network and routinely asks users if they 'know' requested connections and what type of relationship is shared. In order to become friends on Facebook and share information it must be a two-way connection. The unidirectional connections facilitated in Facebook enable a user to follow interests and people (often public figures) not a part of their existing network. A user controls how much of their personal information is accessed through these unidirectional relationships. These connections create links between data and people, and enable rich experiences for the user.

In YouTube the connection between users normally comprises unidirectional 'subscribing'. Subscription-based connections create a link between a user and a channel's content. Subscribers are updated about activity on a channel and users can subscribe to any number channels. YouTube also facilitates bidirectional relationship via friend requests. However, where Facebook encourages a user to know their connections, it is not necessary in YouTube. These friend connections are not emphasised in the YouTube system, as it is not necessary to have a profile or to form connections in order to access YouTube content. Thus social connectivity is not essential in YouTube. YouTube's recommendation system enables a user to find

content based on both direct and indirect connections as well as suggestions based on browsing history and network activity.

In Twitter the leading relationship is unidirectional; many one-way connections are formed based on a shared interest. Individuals can 'follow' profiles and it is not necessary to follow back. Twitter relationships may be known or unknown, direct or indirect, and may often be related to a particular area of interest. In addition, Twitter enables users to form indirect ties by creating 'lists', aggregating content from a number of sources. In this way, users do not have to follow each other to access content in the network; creating lists facilitates users to create a timeline without a direct connection. Twitter is automatically an open public forum unless changed by the user to be private (protected), thus users can access public profiles without signing in or creating a profile like YouTube. However, in contrast with YouTube, to access Twitter content a user must know a Twitter user's handle (or username) or search specifically for key terms, as opposed to the recommendation system provided by YouTube.

Social connectivity is evident in all SNS but the connection possibilities have differing significance. Facebook and YouTube support both forms of connectivity relationships, reciprocal and unidirectional. However, each type is promoted more in one SNS over the other. Facebook promotes existing reciprocal relationships as the main type of connectivity, where YouTube and Twitter promotes following users (whether known or unknown) based on content contributions. Facebook is more social network-focused, constructed around users and their personal information and list of connections, while YouTube and Twitter are content-focused and are built around user interests.

The indirect relationships that are afforded in the three SNS also differ. YouTube creates indirect connections based on browsing history and system generated recommendations. Because of this YouTube users do not depend on subscription-based connections to find relevant content or to create a personalised experience. Twitter's indirect connectivity consists of the creation of lists of users and keyword searches, as well as the ability to 'retweet' others' contributions – thereby enabling propagation to further network nodes. Facebook enables indirect connections by facilitating users to join 'groups' or 'networks'. Distinct from 'liking' pages, the users can see the list of connections and interact directly with them. Furthermore,

Facebook supports users to organise their connections. In Facebook, in order to add a user to a list (such as 'family') the two connections must be linked. These lists (dissimilar to lists in Twitter) enable a user to limit who receives their activity updates, furthermore users can use control who can access their profile information, and group users based on their relationship to the user.

4.2.3 Social Interactivity Features

Further links are formed in social networks through human interaction. These links are possible because of social connectivity. Social interactivity is therefore a result of social connectivity and is the communication between two or more individuals in a network. Social interactivity affordances have four technical features associated: asynchronous and synchronous communication, rating/liking, and external interactions. The system inventory for social interactivity is displayed in Table 4-5.

SOCIAL INTERACTIVITY SYSTEM INVETORY			
Features	**Twitter**	**YouTube**	**Facebook**
Asynchronous Communication	– @Mention/@Reply – Automated Tweets – Direct Message – Retweet – Tweet	– Bulletin Posts – Channel Comment – Comment – On-site messaging system	– Comment – Community Pages – Events – Group – Group Docs – Messages feature – Pages – Places – Pokes – Posts/status updates – Notes – Share/Link (internal) – Questions – Tagging – Video message
Synchronous Communication	-	-	– Chat – Group Chat – Video calling
Rating	– Favorite	– Favorite – Like/Dislike	– Like
External	– Facebook Application	– Auto-share – Share/embed	– Share/ Link (External)

Table 4-5: Social Interactivity System Inventory

The communication features describe the synchronous and asynchronous communications capabilities of an SNS. Users have the ability to post updates or share content via different mechanisms in the site. It is important for users to be active and engaged with their social network to create value in the system. Users that are more likely to share will provide content for the activity feeds, and enable other users to discover. The rating feature in SNS has two functions, to indicate satisfaction with a piece of content and to create a link between the content and a user. Users create these links by 'liking' or 'favouriting' pages and/or content. Users can also automatically push these interactions to external sources through the use of applications and 'autoshare' features.

Social Interactivity Case Comparison

Though most forms of interactivity are afforded in the three SNS, each site promotes specific types of interactions. Asynchronous communication is common to all and consists of direct messages, open/private posts and comments to the community which involve a number of media (text, links, videos, and photos). Twitter messages are very short, brief messages with the ability to tag content and add links. Facebook messages can be longer in nature if required, and media content can be embedded in the messages, such as videos or photos, to view within the system (or externally). Users tag people in their posts or media content, linking people and content together and enhancing discovery mechanisms. YouTube's main form of interaction is through video content. However, users can also comment under these videos. The comments section is not like Facebook's status updates or Twitter's tweets, as comments are not pushed to connected users. Only a channel's video content is aggregated with social connectivity. Following are the keywords reflecting the social interactivity features in each SNS:

- Tweets/retweets (Twitter)
- Status Updates (Facebook)
- Comments (Facebook, YouTube)
- Like (Facebook, YouTube)
- Favorite (Twitter, YouTube)
- Videos (YouTube, Facebook)

Twitter interaction is basic but has evolved with user appropriation. Posts are quite short (140 characters max.) and they make use of specific characters that enrich interactions. Tweets may contain a handle or 'mention' (*e.g.* @username – which directs the message to someone), a hashtag (*e.g.* #topicofinterest – which tags keywords to a tweet and enables them to be searched for and aggregated), or a link to an external website or content. Hashtags and mentions enable users to link content and users together, creating semantic data within the system, facilitating future content discovery and aggregation. Users can also retweet other people's posts further propagating the content to a wider audience. Direct messaging is also available in Twitter which is a private message to a user. Favoriting a post will save the post into a 'favorites' timeline and indicate to others if a tweet has been favorited. It also indicates to others when a tweet has been retweeted and by whom.

YouTube is primarily a video sharing site which enables users to create videos and post them on the network. Users can comment on video content, rate it, and share/embed it externally. Facebook promotes many forms of interactions in a variety of contexts, with the main method being 'status updates' and the ability to comment on and rate these updates. People can be 'tagged' in posts, enhancing connectivity. YouTube and Facebook also have direct messages to particular users using an onsite messaging system. YouTube allows users to comment under channels and video content, which are open to the YouTube community. A channel owner can write bulletin posts, which are directed only to their subscribers and people who view their channel. Facebook and YouTube both enable users to 'like' posts, which unlike Twitter, does not aggregate these posts together. How many people have liked a post/video is displayed, helping to promote it in the network via search or activity feeds.

Facebook has the widest range of asynchronous communication because of the number of features provided to a user. Users can share blog posts (notes), ask questions, upload video messages, tag users to content/places, organise events, interact with a group and manage group documents, be involved in a community through pages and groups, and post comments and updates (including photos, links, videos *etc.*). Facebook also enables synchronous communication with an instant messaging function (chat and group chat) and through video calling (Voice over Internet Protocol).

Rating is a feature common to all three SNS and enables users to indicate their pleasure with specific posts or content, which in some cases aggregates the content for the user and promotes the content in the network. Key words in each SNS:

- Like (Facebook, YouTube)
- Favorite, (Add to) Favorites (Twitter, YouTube)

The act of 'liking' in Facebook differs from the other two sites, as liking serves as a mechanism to form connections (not based on reciprocal friendship connections) but through liking pages of interests, public figures, movies, TV shows, music, status updates, comments, pictures, *etc.* This act forms a connection between the content and a user's profile and further enhances profile building (*e.g.* liked content is displayed in the activity feed and added to the profile information). When a Facebook user has an 'interest' connection in common with an existing 'social' connection the relationship is displayed for both users to see.

Liking and favouriting in Twitter and YouTube is more of a personal action in the context of these systems, as these features are often used to display appreciation of content (including Facebook) and to bookmark that content into a timeline or playlist (excluding Facebook). In the case of YouTube, other users can see the number of likes a video has but not by whom. Users in Twitter have the ability to view who has favorited a tweet, but it more importantly aggregates these tweets into a timeline for a user for future perusal. Favouriting in YouTube shares this capability by adding videos into a favorite playlist for a user. Thus, 'interest' connections in Twitter and YouTube are associated with the content aggregation affordance and similarly may manifest in 'trending topics'. These trends are system-generated, based on browsing history and the number of likes and keywords gaining importance on a given day. The keywords and likes are automatically aggregated by the system, enabling users to access trending/popular content via an activity feed.

The analysis reveals that the fundamental instances of social interactivity vary across the three SNS. Though most forms of interactions are supported, the nature of the websites and the intentions for use differ. Where Facebook and YouTube are media rich, Twitter cannot display media within the system but instead directs a user outside of the system to view the material[5]. Facebook displays photos and videos,

[5] This feature has since been added to the Twitter platform.

and directs users to the original source of the content. In Facebook, an individual is at the centre of the interaction, with varying motivations for interacting with their community – whether it is maintaining social presence or sharing content. YouTube is based on video contributions, not on the direct interactions between users in the system. Twitter also promotes content over social aspects but social connectivity is essential to help the content reach a wider audience. Tagging is an essential part of these interactions in Twitter. Facebook has emulated this capability by enabling users to tag people in status updates *etc.* Twitter goes a step further with the ability to tag keywords; creating a huge array of content around specific topics and enhancing the ability to locate it, which impacts on the content discovery affordance.

4.3 Content Affordance System Inventory

This section presents the findings for the content affordance system inventory. Content affordances rely on social affordances and contain many similar elements. However, they refer specifically to the capability to access or share content within the network and are highly relevant to music consumption activities. Content affordances include content discovery, content sharing, and content aggregation and the analysis resulted in eight technical features. Each of the content affordance features are presented in Table 4-6 with a list of corresponding instantiations within the case sites.

4.3.1 Content Discovery Features

Content discovery is the ability to locate and access information and content in a social network. The system inventory for content discovery is displayed in Table 4-7. The findings reveal that the content discovery affordance has four associated technical features: (1) interactions/network feeds, (2) search, (3) activity feeds, and (4) external access to content.

To organise user activity and content, social network sites use activity feeds of aggregated network content which facilitate users to browse for updates. Most activity feeds are in chronological order but can sometimes be filtered by the user. Content posted to the network may be viewed internally or externally to the system, depending on the format and platform. Often the content comes to the user, as opposed to users searching specifically.

FEATURES	TWITTER	YOUTUBE	FACEBOOK
Content Discovery			
Aggregated Content/Activity Feed	– Timelines (Tweets/Retweets/ @Replies/Favorites/Lists)	– Charts/Featured/ Spotlight/Trend – Browse/Category/Topics – Recommendations/Suggestions – Subscriptions/Favorites	– News Feed – Related Posts – Wall
Interactions/Network Content	– @Mention/@Reply – Lists – Tweet/Retweets/Top Tweets	– Annotations – Bulletin Posts	– Applications – Comments /Messages/Posts/Notes – Pages/Community pages/Groups
Content Search	– #Hashtags/ Trends – Browse Interests – Searches/Saved Searches	– Search – Browse	– Search
External Access of Content	– RSS Feed – Widgets	– Citizen Tube – Creators' Corner Blog – YouTube Facebook/Twitter	– Share/Link (external) – Social plugins
Content Sharing			
Interactions/Network Content	– #Hashtags – @Mention/@Reply – Favorite – Tweet/Retweet – Promoted/Auto Tweet	– Annotations – Bulletin Posts – Description – Favorite – Live-Streaming	– Applications – Comments /Messages/Posts/Notes – Like/Tag/Places – Pages/ Community pages/Groups – Photos/Videos
External Sources of Content	– Buttons/Widgets – Applications – RSS Feed/OAuth	– Share/embed content – Auto-share	– Share/Link (external) – Social plugins
Content Aggregation			
Aggregated Content/Activity Feeds	– #Hashtags/Trends/ Top Tweets – @Reply/Favorites/ Retweet – Lists – Saved Searches – Timeline	– Annotations – Browse/ Category/Topics – Charts/Featured/ Spotlight/Trend – Favorites/Playlists – Recommendations/Suggestions – Subscriptions	– Applications – Comments /Messages/Posts/Notes – Like/Tag/Places – Pages/Community pages/Groups – News Feed/Wall – Photos/Videos
External Aggregation of Content	– Buttons/Widgets – RSS Feed/OAuth – Applications	– Citizen Tube – YouTube Facebook/Twitter	– Share/Link (external) – Social plugins

Table 4-6: Content Affordance System Inventory

Connections influence the aggregation of this content and therefore the discovery. This implicates the choices users make when connecting with others (social connectivity) and content that is accessible to the user (content aggregation). Other such discovery methods may include recommendations based on activity, interests, and history or interactions from a user's connections. The active form of content discovery enables users to search for information and content in the network. Users can search in SNS using key terms whether for profile pages or topics of interest. Content discovery also includes the ability access network content from external sources, through RSS feeds, widgets, and social plugins *etc.*

CONTENT DISCOVERY SYSTEM INVETORY			
Features	**Twitter**	**YouTube**	**Facebook**
Aggregated Content/ Activity Feeds	– Timeline	– Charts – Favorites – Featured – Promoted videos – Recommendation – Spotlight – Subscriptions – Suggested Videos – Topics/ Category – Trends	– News Feed – Related Posts – Wall
Interactions/ Network Content	– @Mention/ @Reply – @Twittersuggests – Follow Friday – Links – Lists – Retweet – Top Tweets	– Annotations – Bulletin Posts	– Applications – Community pages – Friendship Page – Groups – Notes – Pages – Share/Link (internal) – Status updates
Search	– #Hashtags – Browse Interests – Searches/Saved Searches – Trends	– Search – Browse	– Search
External Access to Content	– RSS Feed – Widgets	– Citizen Tube – Creators' Corner Blog – YouTube Blog – YouTube Facebook – YouTube Twitter	– Share/Link (external) – Social plugins

Table 4-7: Content Discovery System Inventory

Content Discovery Case Comparison

Facebook has the most limited search feature. It allows users to search for people and pages, but does not enable users to search through content. Content in Facebook is only accessible through specified connections and specific aggregation (generally system-based aggregation). In contrast, Twitter and YouTube enable users to search for network content whether a connection has been formed or not. In YouTube publicly shared content can be accessed and viewed by anyone (even if no profile or connection exists), in this way, YouTube is primarily a media sharing site, with social networking features available. Facebook and Twitter require a profile and connection in order to access content via personal activity feeds. Though Twitter allows external users to search for network content, the real value exists in building a timeline based on following profile pages.

The ability to 'tag' content is enabled in all three SNS and is a part of each SNS affordance. It is described here as a part of content discovery because it enhances the ability to search/discover content. Tagging differs in the three SNS. YouTube 'tags' describe the content in a video for searching purposes. In contrast with Twitter and Facebook, it is not used in comments or posts for linking people and content. Facebook enables users to tag people or pages into photos, posts, places, videos, notes, activities, sports, education and work, *etc.*, creating more relational data. Twitter 'tags' aggregate content into streams of updates and allow people to find content easily and link to that content. Information is propagated across the network with the semantic linking of data and is the main form of discovery (especially in Facebook and Twitter) next to active searching (more relevant to YouTube). Following are the keywords reflecting content discovery through tagging features in each SNS:

- Tagging; Tags (Facebook, YouTube)
- Place Tags (Facebook)
- #Hashtags, @Mentions (Twitter)

Tagging in Twitter has evolved through user behaviour and has become a very important feature in the website. Within Twitter the tagging feature is known as #Hashtags. These hashtags enable users to categorise Tweets based on relevant keywords. Based on these keywords tweets can be searched for easily and

aggregated into a list. It also enables Twitter to follow and recommend topic trends based on popular 'hashtagged' words. From the system inventory, tagging in Twitter has been aligned with (1) Social Connectivity, (2) Content Discovery, (3) Content Sharing, and (4) Content Aggregation.

(1) @Mentions link people and content through posts.
(2) Hashtags enable users to discover tweets and content based on specific keywords (hashtags).
(3) Hashtags enable users to share their tweets based on keywords or topics, creating a link between content and forming a connection between disparate users and tweets.
(4) Hashtags are aggregated into a list by Twitter and can be further filtered based on 'Top', 'All', or 'With Links', these lists can be saved and accessed via a users' Twitter homepage.

The ability to tag usernames is also enabled in Twitter, these are known as @mentions or @replies. Users can direct messages or conduct conversations via the use of mentions, or just highlight a relevant user in a post.

Tagging in YouTube describes the content in a video and is used for searching purposes. A user uploading a video will be prompted to enter specific tags to describe the content of the video. When users search the site with keywords, tags will help YouTube find the most relevant content. From the system inventory, tagging in YouTube has been aligned with (1) Content Discovery and (2) Content Aggregation.

(1) Tags are used in YouTube to help users discover the most relevant content based on keywords.
(2) Tags enable YouTube to aggregate a list of videos when a user searches for key words or terms which match a video's tags.

Tagging in YouTube has not been aligned with content sharing in this analysis because when a video is uploaded it is automatically being shared by the user whether privately or publicly. Tags are used to make search easier because of the video format. Tagging provides key metadata about the video content to make it accessible in the network. The tags do not link people or pages to the content.

Facebook enables users to tag people or pages into photos, videos, notes, activities, sports, education and work, *etc.* This feature links content with people and pages. A new feature was recently added enabling users to tag people in status updates also, this includes referencing friends, groups or even events. Friends tagged in status updates receive a notification about the status, which is also posted to their wall for their connections to see (these tags are similar to Twitter @mentions except for the fact that the posts are added to the users profile feed). This feature enables content to be shared to people and groups easily and creates more relational content. From the system inventory, tagging in Facebook has been aligned with: (1) Social Connectivity, (2) Profile Building, (3) Social Interactivity, and (4) Content Sharing.

(1) Tags link people and content through posts.
(2) Enables tagging of people (friends) in information like activities and work on the profile information page.
(3) Tagging, for example in status updates, is an asynchronous form of public communication which automatically links a person to the post and pushes the message to that person's wall.
(4) Content can be shared with people by tagging them in posts, *e.g.* photos, videos, links, *etc.*

Both Twitter and YouTube aggregate topics based on tags when a user searches for content. Twitter further enables the user to save specific searches for future use, which is not a feature on YouTube. Twitter in contrast to YouTube links content and connections, both by tagged posts viewable by followers and the ability to tag people and content in a post at the same time. Both Twitter and Facebook link people to content through the use of tagging. However Twitter enables these topics to be aggregated which is not enabled by Facebook. Facebook is connection-oriented as opposed to topic-oriented and in contrast enables a user to access tagged information only via connections and thus is concerned with linking content through people. YouTube however is topic-oriented and aggregates tagged topics together whether people are linked or not.

4.3.2 Content Sharing Features

Content sharing is the potential for information dissemination along the social links in a network. Content sharing is enabled through social interactivity. The system inventory for content sharing is displayed in Table 4-8. The findings reveal that the content sharing affordance has two associated technical features: (1) interactions/network content and (1) externally shared content.

An SNS provides a user with the capability to share content, whether information, opinions, recommendations, links, videos, photos, and so on. The features that enable content sharing are aligned with the features that enable social interactivity. Specifically, content sharing is enabled through posts and updates by a user in a variety of formats, which includes the ability to share/embed this content to/from external sources.

CONTENT SHARING SYSTEM INVENTORY			
Features	**Twitter**	**YouTube**	**Facebook**
Interactions/ Network Content	– #Hashtags – @Mention – @Reply – Automated Tweets – Favorite – Follow Friday – Links – OH/Overheard – Promoted Tweets – Retweet – Tweet	– Annotations – Bulletin Posts – Description – Favorite – Live-Streaming – Video Editor	– Applications – Commenting – Community pages – Groups – Like – Notes – Photos – Places – Posts – Share/Link (internal) – Status update – Tagging – Videos
Externally Shared Content	– Button: Tweet – Facebook Application – RSS Feed – Third Party Applications – Widgets	– Share/embed – Embed Content – Auto-share	– Share/Link (external) – Social plugins – Embed public post

Table 4-8: Content Sharing System Inventory

Content Sharing Case Comparison

The type of content sharing in all three SNS differ. More specifically, Twitter and Facebook interactions are posts to the surrounding network. In contrast, the main contribution by users in YouTube is the uploading and sharing of video content; the majority of users' comments concern opinions about videos rather than direct

interactions with connections. These comments are open to everyone and are not intended for content sharing purposes.

Another difference that exists between Twitter and both Facebook and YouTube, is the ability to view the content that is shared and discovered within the network. Unlike Facebook and YouTube, Twitter does not enable content to be viewed in the platform but instead links to an external source. The nature of Twitter only facilitates users to share short posts within a limit of 140 characters, which enable the user to share internally tagged content (*e.g.* #hastags/@mentions) or external links (*e.g.* URLs). The tags direct users to an aggregated list of tweets and the links lead a user to external websites to view content.

The three SNS differ in the way that content is shared/embedded. Following are the keywords reflecting content sharing features in each SNS:

- Retweet (Twitter)
- Share (Facebook, YouTube)
- Embed (Facebook, Twitter, YouTube)

YouTube enables users to share video content in the network. In addition, YouTube enables users to share this video content to external sources via email, other social network sites, or external websites, *etc.* Moreover, YouTube video content can be embedded into external websites for viewing. External links are generally not shared on the YouTube platform, instead YouTube videos are embedded and shared in other social network sites. Likewise, Twitter enables tweets to be embedded as a picture on an external web page. However, unlike YouTube and Twitter, Facebook posts (from private profile pages) cannot be shared externally or embedded into external websites, unless it is from an open public page.

Internal sharing in Facebook and Twitter differ from YouTube, because sharing a post in Facebook (share post function) and Twitter (retweet function) propagates the post internally, whereas YouTube enables a video to be shared or embedded in external sites (including Facebook and Twitter), not internally propagated in the YouTube network. Internally sharing a post in both Facebook and Twitter, adds other users' posts to their activity feed and thus their group of connections. Internally sharing enables users to spread content across direct and indirect connections.

Facebook is the most varied in its sharing mechanism with a variety of formats supported. External content (such as videos or images) can be embedded in Facebook status updates. Furthermore, through the use of social plugins and applications, Facebook enables users to log in to many different sites using the Facebook profile and 'like' and 'comment' on content in external web pages, which automatically posts to their profile.

4.3.3 Content Aggregation Features

Content aggregation is the ability for users to syndicate and aggregate content in a network. It involves collecting material from a number of sources based on a user's personal profile. The system inventory for content aggregation is displayed in Table 4-9. Content aggregation has two technical features associated with it: (1) aggregated content/activity feeds and (2) external aggregation of content.

Users of SNS have the capacity to create lists and groupings of content and users. These lists create a stream of content for an individual, based on preferences. These streams can be user built, customised for a particular topic, or are provided by the system functionality via activity feeds. Tagging is an important function in an SNS and allow users to annotate resources in order to store, collect, and retrieve them.

CONTENT AGGREGATION SYSTEM INVENTORY			
Features	**Twitter**	**YouTube**	**Facebook**
Aggregated/ Modified Content	– #Hashtags – @Mention/ @Reply – Favorite – Lists – Retweet – Saved Searches – Timeline – Top Tweets – Trends	– Annotations – Browse – Charts – Favorites – Playlists – Recommendations – Subscriptions – Suggested Videos – Topics – Trends	– Applications – Community pages – Friendship pages – Group Docs – Homepage – News Feed – Notes – Pages – Photos – Places – Posts – Questions – Related Posts – Share/Link (internal) – Video – Wall
External	– Buttons – RSS Feed – Third Party Applications – Widgets	– Citizen Tube – YouTube Facebook – YouTube Twitter	– Share/Link (external) – Social plugins

Table 4-9: Content Aggregation System Inventory

Content Aggregation Case Comparison

All three case sites employ a form of activity feed. Activity feeds involve the ability to aggregate content either based on social or content links, and are either system or user-generated. This feature is one of the most important ways for users to access content in SNS and will be the primary way of discovering content in an SNS. It is dependent on the choices that a user makes with regard to their activity levels, profile building, and the connections they have made. Facebook utilises a 'News Feed' of user activity updates. Twitter employs a 'Timeline' which aggregates all of the tweets of selected profiles chronologically. YouTube has a variation of these activity feed 'themes' and involves not just activity streams of a user's subscribed channels, but also other recommendations based on a user's history and interests. These activity feeds keep people on social network sites up-to-date with their connections and organises the content into manageable displays for browsing and locating interesting information. Following are the keywords reflecting content aggregation features in each SNS:

- Timeline: Tweets, Retweets, @Mentions, Favorites, Lists, Saved Searches, Top Tweets (Twitter)
- Newsfeed, Wall, selected feeds: Applications, Community pages, Friendship pages, Notes, Pages, Photos, Places, Posts, Questions, Related Posts (Facebook)
- Subscriptions, Annotations, Charts, Favorites, Playlists, Topics, Browse, Suggested Videos, Recommendations (YouTube)
- Trends (Twitter, YouTube)

Most activity feeds are in chronological order but can be filtered using other key terms. The three sites in the system inventory all employ a form of activity feed under different names. Facebook filters the news feed of a user based on social connections and liked pages, and organises it based on the 'top stories'. Users can then filter this newsfeed based on 'most recent', specific pages, connections, or relationships. Twitter employs a 'Timeline' which aggregates all of the tweets of followed profiles chronologically. These timelines are on the homepage and a number of filtering options are available: (1) Timeline (all followed profiles), (2) @Mentions (all tweets where the user is referenced), (3) Retweets (by others, by a user, and a user's tweets retweeted by others), (4) Searches (saved searches with

specific topics), and (5) Lists (lists created by user or followed by user). On the Twitter profile page there are a number of timelines also including: (1) Tweets (all tweets/retweets by user), (2) Favorites (all tweets marked as favorite), (3) Following (list of followed profiles), (4) Followers (list of followers), and (5) Lists (lists created by user or followed by user). YouTube in contrast has a system generated activity feed for the main YouTube homepage, based on recommended videos and user activity, but also enables a user to sign in and view specific activity feeds based on subscriptions and further recommendation aspects. The user's personal activity feed is on their homepage, but a feed is also available on YouTube's official homepage, and another next to viewed videos.

Another form of aggregation is the 'favorites' feature in Twitter and YouTube. Tweets can be favorited in Twitter and aggregated into a list on the users profile page. Videos in YouTube can also be favorited which aggregates videos into a favorites playlist. Videos can be liked and disliked by users and is used to signal video popularity and impacts on activity feed recommendations. Facebook liking creates a link between the user and content/page which builds the users profile, however in some cases content is not aggregated. For instance a user can 'like' a comment, photo, and video, *etc.* which just signifies appreciation and keeps user's update-to-date on the activity concerning the content. However, users can also like page, groups, networks, *etc.* and it automatically aggregates the page's updates to the user's newsfeed.

In addition, tagging has become an essential feature for the aggregation of disparate sources in Twitter. Hashtags enable users to categorise tweets based on relevant keywords. Based on these keywords tweets can be searched for easily and aggregated into a list for a user. Facebook and Twitter are organised based on the historical evolution of user contributions, whereas YouTube creates a snapshot of a user's interest based on browsing history and trends in the system (with or without social connectivity). While a user's direct connections are crucial to the activity feed of Facebook and Twitter, YouTube's activity feed does not necessarily require that type of connectivity. YouTube's homepage includes recommendations and the ability to explore content based on genre or topic. Trends are a good way of discovering content in Twitter and YouTube, as popular topics are tracked and

aggregated. YouTube and Twitter both promote the exploration of content, where Facebook is more tightly coupled with a user's social network.

4.4 General SNS System Inventory

Table 4-10 presents both the social and content affordance features in the context of general social network sites based on the comparative analysis in the previous sections. For each technical feature, its functionality is described and examples of general SNS instantiations are provided. This list of features is used in the analysis of the case study interview findings in phase two of data collection.

Affordance	Technical Feature	Functionality	Instantiations
Social Connectivity	Connecting	Ability to connect to a person or page	Follow, add friend, subscribe, join/like pages
	Connection Search/ Suggestions	Ability to search for a connection or view connection suggestions	Connection search, suggestions/recommendations
	Connection Lists/Groups	Ability to connect to a group or network or to assemble a group	Make lists, join networks/groups
Social Interactivity	Asynchronous Communication	Ability to interact and communicate directly to an individual or open to a community asynchronously	Post, comment, message, tweet, retweet, like, tag, places, events
	Synchronous Communication	Ability to interact in real time to an individual or a group	Chat, video calling
	Rating/Liking	Ability to rate communications or content	Like, dislike, favorite
	External Interactions	Ability to interact with a community using an external technology or source	Autoshare, embed, share, link, applications
Profile Building	Manage/Edit Profile	Ability to manage/edit the profile information and content, and design	Profile information, tagging, liking, multimedia content, display, uploading content
	Profile Updates	Ability to receive updates about profile activity	Email notifications
	Location Tagging	Ability to display location of posts/content/person	Geotagging, places
	External Profile Management	Ability to manage profile information from an external source or link accounts for automated updates	External applications
	Mobile Application	Ability to access the site and perform functions from a mobile application	Mobile applications
Content Discovery	Interaction/Community Content	Ability to see and interact with the content shared by the community including direct and indirect interactions	Posts (all forms), direct messages, lists
	Content Search	Ability to search or browse for specific content/people	Search, browse
	Activity Feeds	Ability to see content shared via an organised aggregated content feed based on specific criteria	Timelines, newsfeed, wall, trends, recommendations, topics
	External Sources of Content	Ability to access content within the site that is from an external source	Links, applications
Content Sharing	Interactions/Community Content	Ability to share content/information in a number of ways	Posts (all forms), direct messages, lists
	External Sources of Content	Ability to share from an external source and with an external source to the social network	Links, autoshare, widgets, social plugins
Content Aggregation	Aggregated Content/Activity Feeds	Ability to access and/or create aggregated forms of content for the management of large amounts of information	Timelines (all forms), content feed, newsfeed, wall, trends, recommendations, topics
	External Aggregation of Content	Ability to access and/or create aggregated forms of content external to the social network	Links, autoshare, widgets, social plugins

Table 4-10: General SNS System Inventory

4.5 Chapter Conclusion

This chapter addressed research question one: *what are the technical features of SNS?* Three social network sites were selected for the system inventory: Facebook, YouTube, and Twitter. Data was collected and analysed using the user help guides and documentation. Examining the help guides resulted in a list of features and their intended functionality. Each feature was coded using the generic social and content affordances and twenty technical features and their instantiations resulted. A system inventory for each SNS was presented aligned with specific instantiations in each case site. The three case sites were compared and contrasted, and any similarities or differences that occurred across each site was highlighted. To summarise, the social and content affordances proposed in the literature review (Chapter 2) were confirmed. This resulted in a system inventory of SNS, an understanding of the key generic features of SNS and the relationship between the social and content affordances. This data provides SNS affordance measures and coding categories for phase two (interviews) of data collection. The findings presented here will be used in phase two to understand the features users employ for consumption activities in SNS, and thus map the affordances of SNS for the consumption of cultural goods. Furthermore, by understanding which features afford which behaviours, the system inventory can be used in future research to understand user behaviour. All three SNS displayed similar affordances provided by varying features and differing intended purposes. The two types of generic affordances (social and content) are relevant to the study of SNS by enabling research to view SNS services through their social affordances and the affordances to manage, share and find content. The findings suggests that there is a relationship between the social and content affordances, in particular, the capability to find and connect to other people is important to the success of a social network system and is the foundation of the other affordances: social interactivity, content discovery, content sharing, and content aggregation. Content aggregation is also a crucial feature for discovering and sharing content amongst a network, where content sharing is facilitated by the social interactivity affordance. This chapter has provided a complete overview of three different types of SNS, all very popular and all with different underlying intentions. These systems share similar affordances within their given contexts and have a wide variety of capabilities, whilst also tailoring to specific user's needs and goals.

CHAPTER 5
FINDINGS PART 2: USER ACTIVITIES AND AFFORDANCES

5.1 Introduction

This chapter presents the findings from the case study analysis (described in Sections 3.3.2.2 and 3.3.3.2) phase two of the study. The purpose of the case study analysis was to address research questions two and three highlighted in grey in Table 5-1.

RESEARCH QUESTIONS		METHOD	OUTCOME
1	*What are the technical features of SNS?*	**Phase 1:** System Inventory	– System inventory of 18 technical features aligned with the generic SNS affordances
2	*What activities do users undertake when consuming cultural goods in SNS?*	**Phase 2:** Interviews	– Four active/passive user types – Three user activity process models
3	*What are the affordances of SNS for the consumption of cultural goods?*		– Seven affordances for the consumption of cultural goods using SNS – Theoretical research model with 14 propositions of affordance and activity relationships and dependencies

Table 5-1: Research Questions and Study Outcomes

To address the research questions and document the activities users undertake in SNS for consuming cultural goods, a case study was conducted in selected social network sites. Two general social network sites were selected (Facebook and Twitter) based on their general SNS qualities, their non-music specific nature, and also their popularity as SNS platforms. Within each SNS, two groups (music-oriented in nature) were selected: a (1) general music group, and a (2) musician-specific group. The respondents were sampled from these four groups, for a total of 24 interview respondents (six people from each group). The interviews were semi-structured and collected data on general music consumption activities, general SNS usage, and specific music consumption activities within the SNS (based on information seeking, information encountering, and information sharing activities from Section 2.4.3). NVivo Qualitative Data Analysis software was used to facilitate the process of analysis, implemented through data coding techniques (*cf.* Hair *et al.*, 2007; Eisenhardt, 1989; Miles and Huberman, 1984).

Users displayed differing intentions when using social network sites in the interview evidence. These intentions are described from three perspectives: active seeking, passive encountering, and content sharing, which shape how the rest of the interview findings are presented and are summarised in Section 5.1.1.

Hence, the chapter is organised under each perspective, presenting the findings for both research question two and three respectively. Thus, within the active seeking, passive encountering, and content sharing findings sections, an 'activity process model' is presented, which represent the findings for research question two: *what activities do users undertake when consuming cultural goods in SNS?* After each discussion of the activity process models, the affordances for the consumption of cultural goods using SNS are outlined, resulting in a corresponding affordance model. This discussion on affordances and consequent affordance models addresses research question three: *what are the affordances of SNS for the consumption of cultural goods?* The affordances and the affordance models described in the following sections are a combination of the intended SNS affordances (from the system inventory in Chapter 4) and the user activity process models. These affordance models display the interplay between the technical artifact and a particular task undertaken by a user, and thus represent a comprehensive picture of affordances.

Section 5.2 presents the findings for the first perspective: active seeking. Firstly the active seeking process model is outlined, which represents the steps a user undertakes for actively seeking in an SNS and answers research question two (Section 5.2.1). Following this, the active seeking affordances are presented, addressing research question three (Section 5.2.2). These affordances are prefaced by any active seeking constraints evident in the data. Three active seeking affordances are outlined including: (a) connection search and follow, (b) connection search and explore, and (c) searching key terms.

Section 5.3 presents the findings for the second perspective: passive encountering. Firstly the passive encountering process model is outlined, which represents the content that users passively encounter in an SNS when not specifically seeking music content, this section addresses research question two (Section 5.3.1). Following this, the passive encountering affordances are presented, answering research question three (Section 5.3.2). Two passive encountering affordances are

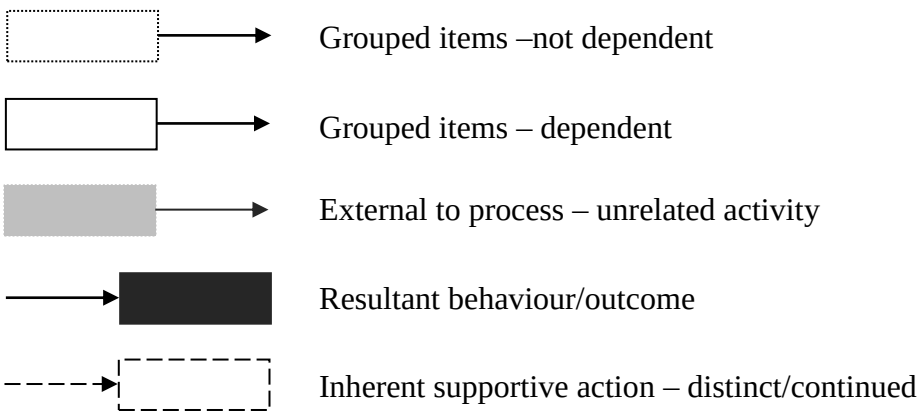
outlined including: (d) browsing activity feed and discovering content and (e) directed connection interactions.

Section 5.4 presents the findings for the third perspective: content sharing. Firstly, the content sharing process model is outlined addressing research question two (Section 5.4.1). This model represents the act of sharing content, which inherently enhances discovery mechanisms in the SNS and results in further sharing behaviours (both internal and external to the system). Furthermore, four types of sharers and sharing behaviours are identified and integrated into the process model: (1) initiators, (2) promoters, (3) recruiters, and (4) propagators. In advance of the content sharing affordances, a brief discussion takes place on the positive and negative connotations associated with content sharing. Subsequently, two content sharing affordances are outlined (Section 5.4.2): (f) creating and sharing content and (g) propagating internal content.

Finally, a theoretical research model is presented encompassing the relationship between the affordances and their hierarchies and dependencies, and between the affordances and the activities that they enable (Section 5.5). The theoretical research model includes 14 propositions theorising the affordance-affordance relationships (eight propositions) and the affordance-activity relationships (six propositions).

Following is a diagram legend, which describes the symbols used in the models outlined in the rest of this chapter.

Diagram Legend:



5.1.1 User Perspectives for Task Initiation

This section presents an overview of three user perspectives when initiating a consumption task. Each perspective, and its resulting user action, influences future outcomes/actions. They are based on the types of activities that users engage in (abstracted from the interview data in Sections 5.2, 5.3, and 5.4) and the actual use afforded by the technology (visible in the chains of evidence tables in Appendix C). These perspectives informed the development of the user activity process models (outlining the steps that users take for consuming cultural goods and any resultant behaviours) and the categorisation of the affordance findings.

The three task initiation perspectives are: (1) active seeking, (2) passive encountering, and (3) content sharing. Active seeking and passive encountering represent the content discovery aspects of music consumption related to the initial stages of music consumption and the tasks involved therein. In the active seeking perspective, a user specifically seeks content and undertakes purposeful consumption tasks within the environment (searching or exploring), which result in discoveries. Any discoveries made may include sampling and may result in content being shared internally in the network (further enhancing the likelihood of discovery for others) or externally to the network. A user may transition from active seeking to a passive encountering perspective at any time, when a process is interrupted or if serendipitous discoveries are made unrelated to the current task.

Conversely, in the passive encountering perspective, a user has no particular music consumption intentions and begins by browsing or exploring in an indirect manner in the SNS, which subsequently results in serendipitous encounters (discovery and sampling). This is the most dominant activity within the three case sites and the most common among all of the case site user's practices. This perspective displays the significance for the initial act of content sharing, which enhances the likelihood of passive encounters in a network. Having connections in an SNS is also very important for enhancing passive encounters, as a connection's content is added to the user's timeline. Like active seeking, passive encounters may lead to further sharing behaviours. Furthermore, once a passive encounter has been made a user may transition into the first perspective again (active seeking) to seek further information based on a discovery.

Content sharing results from the latter stages of music consumption, but instigates future discoveries for others. Content sharing has an inherent role in the active seeking and passive encountering perspectives, as when discoveries are made it may prompt content sharing behaviours (whether internal or external to the system occurring directly after a discovery or at a later stage). Furthermore, sharing content in social network systems enhances the likelihood of discovering content when both actively seeking and passive encountering.

The specific tasks involved in these perspectives are outlined in more detail in the 'activity process models' and are explained using activity phases (see Section 5.2.1, 5.3.1, and 5.4.1). Users may switch between each perspective based on a number of reasons while interacting with an SNS system. Possible reasons include: changing intentions, changing elements, encounters, interactions and other factors such as time constraints and environmental changes; among a myriad of possible interruptions or causes. Learning is ongoing in these interactions as a result of the discoveries made and the continued task-technology interactions which inform a user's behaviour and updates their beliefs.

To conclude, these perspectives represent the initial intentions of a user when undertaking consumption tasks to discover and share music content in the context of social network sites and are described up-front to help clarify the types of activity process models outlined in subsequent sections and the way in which the affordance findings are organised.

5.2 Active Seeking Findings

This section first presents the active seeking process model. The model is broken down into three phases based on the initial interaction, the outcome of the interaction and any further directed activity. Three affordances for active seeking in SNS are presented based on the findings: (a) connection search and follow, (b) connection search and explore, and (c) searching key terms. Evidence for each affordance is presented in chains of evidence tables (see Appendix C for full tables) and an affordance model representing the technology and activity interplay is displayed and described.

5.2.1 Active Seeking Process Model (RQ2)

This section proposes an active seeking process model based on the active seeking perspective proposed in Section 5.1.1. This process model represents the consumption tasks undertaken by users to discover content in the context of the selected social network sites when a user is actively seeking music.

Specific tasks have been assigned to particular phases in the activity process models. The phases represent the intentions at the beginning of an activity (through specific user tasks) and the resulting phases thereafter, representing potential actions. Each type of activity is described in more detail based on Figure 5-1 and the phases in the activity models are described in the context of consumption tasks.

Active seeking is used to categorise activities for discovering content in an SNS when a user has something specific in mind and searches or explores in a directed manner; users purposely seek something or browse specifically for content. Users may then switch between the user perspectives once a task has been undertaken.

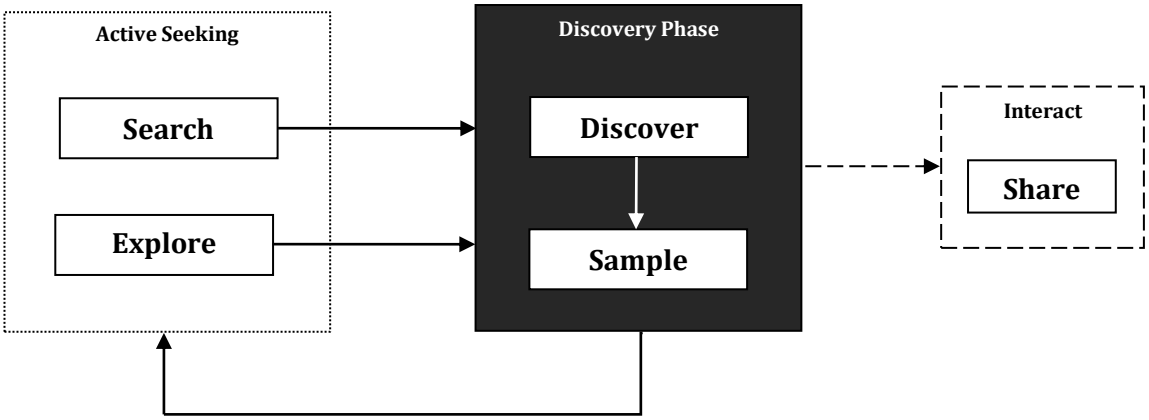


Figure 5-1: Active Seeking Process Model

Phase 1 – Active Seeking: An individual will actively seek specific content or information within a social network system by either searching for specific keywords or exploring in a specific way.

Phase 2 – Discovery Phase: Searching and exploring may lead an individual to discover content/information. Discovery may or may not involve sampling. The user may be directed to an external site or may remain within the social network system.

Phase 3 – Further Directed Activity: The individual may then share the content on (internally or externally) or it will lead to further active information seeking (internally or externally).

5.2.2 Active Seeking Affordances (RQ3)

This section presents the evidence for discovering content in social network sites based on active seeking. Active seeking behaviours have resulted in three affordances based on the findings:

Affordance A – Connection search and follow

In this instance, users can search for a specific artist or page with the intention to add them to their timeline. For example, in the case of Twitter, users 'follow' an artist's page, while in Facebook a user will 'like' an artist's page. In both instances a one-directional relationship is formed. The user is adding the artist's activity updates to their timeline. These cases involve public pages that are open to the network, but users may also have more private reciprocal relationships in Facebook where they search for a connection and have the option to add this person as a 'Friend', which must be accepted.

Affordance B – Connection search and explore

In this case, a user searches for a specific artist or page with the intention to browse the returned pages. In this instance, a connection has not been formed yet, or may already exist. Facebook will return a list of possible pages to a user and they can select from the results and visit the chosen profile page for browsing. Twitter has an additional dimension in comparison to Facebook when returning search results. A user may choose to view possible profile pages to visit, as with Facebook, or choose to browse through posts that mention said artist or page. The 'mentions' are aggregated into a timeline of public posts accessible to all the network – no connection is required to view this content.

Affordance C – Searching key terms

Users will also search for key words or for specific content (not specifically for an artist or a specific page). This is most apparent in Twitter, as Twitter allows user to search through posts that are open to the network. This is less evident in Facebook as content is not openly available to users as it is more connection-centric. However

terms can be entered into the Facebook search bar and pages are presented to the user concerning the query (when evident this has been characterised as Affordance B).

These affordances are discussed in the following subsections and the evidence from the interviews is presented. However, negative associations were prevalent when discussing actively seeking content in a social network setting. Thus, the active seeking constraints are presented in advance of the active seeking affordances. It is worth noting that searching for and following connections is an important step by users in order to increase the content accessible in their timeline, and is therefore a crucial step in allowing users to passively encounter content later. This will be discussed in more detail as the evidence is presented.

5.2.2.1 Active Seeking Constraints

Negative associations were very prominent in the interviews when discussing actively seeking music (see Appendix C-1 for the chains of evidence and Table 5-2 for counts based on mentions across case sites).

MENTIONS OF ACTIVE SEEKING CONSTRAINTS					
Theme Description	**Twitter**		**Facebook**		**Total Mentions**
	AP	**GM**	**BK**	**PR**	
Lack of active seeking – passive encountering preferred	2	3	2	3	10
General music seeking difficult – directed search promoted	1	-	2	1	4
Search difficult – too many search results	-	-	1	2	3
Total Mentions	3	3	5	6	**17**

Table 5-2: Active Seeking Constraints – Mention Counts

Three themes emerged from the interview evidence: (1) passive encountering is preferred and thus users displayed limited active seeking behaviours, (2) general music seeking is difficult, consequently directed search is preferential, and alternatively (3) searching is sometimes difficult as too many search results are returned, without any filtering mechanism finding what is sought can be arduous even if the search has been directed.

Many of the users do not associate Twitter or Facebook with active seeking, but rather with passive encountering.

> ***GM3:*** *Not searching, Twitter searching is kind of quite rag tag anyway, it's not the greatest search engine or anything. It's more for passive acquisition I suppose might be the word; it's just I like to see what people are talking about rather than searching actively on it.*

What has emerged when discussing actively seeking music is that in most cases it is important to first know exactly what you are looking for, before searching in the social network. As respondent PR2 reiterated, Facebook is not the best tool to directly find specific music, but is more useful for stumbling upon new music indirectly. This user stated Google or other websites are more useful for music search.

Likewise, broad search is not ideal on these platforms, as too many results will be returned and it is difficult to know what is relevant. In the case of music it is therefore necessary to search for a specific band as opposed to trying to find content based on music genres or taste preferences.

> ***GM6:*** *If you did just put in avant-garde you would just get so many tweets and so much irrelevancy that you kind of I think you need to know almost what you are looking for before you go in there and hence that is why I kind of tend to rely more on recommendations from other people in the first instance and why you know I might pick up a band from a random Last.fm playlist that has come up that has interested me and I will look for them to see if they have a Twitter account and then follow them.*

When actively seeking in the SNS it is essential to be direct and specific with a search for music or bands, and then relevant content and/or profile pages can be found. Most users stated that they only search a musician in order to browse or connect with their profile page. It is then that they have access to content through their timeline, which enable passive encountering down the line.

> ***BK1:*** *It's easier to find about a band on a newspaper music site or a blog rather than on Facebook, I suppose you couldn't actively search on Facebook for music just randomly looking for bands, so you need to find it on a different site and when you know the band's name and you like them then you can go onto Facebook. That's what Facebook is good for. It is not good really for searching for bands like say YouTube would be, but when you know the band and you like them then you can*

actually follow them and look at their activity on Facebook. It's good for band activity rather than finding a band.

Another aspect that was mentioned by Facebook users is the fact that even specific search can be difficult as there are so many people and pages in Facebook that sometimes there are too many search results returned and it becomes difficult to locate the desired page.

PR1: *Right now in Facebook if you search someone's name you're just going to get a thousand people with the same name, and then there is going to be bands thrown in there, and there's going to be news sites thrown in there, and there's going to be clubs and events thrown in there. There's no way to really refine what you're looking for. So that's something that just puts me off.*

Facebook and Twitter are not the most ideal environments for purposeful browsing or general music seeking. Active seeking in these SNS usually consists of users searching for specific content – to connect with profiles or to browse posts in a directed nature. This is a first step in building a personalised activity feed. Active purposeful seeking is motivated by the intention to add content to the activity feed – enabling passive encountering. The following section outlines the type of active seeking undertaken in the case sites and the resulting affordances.

5.2.2.2 Affordance A – Connection Search and Follow

An integral feature of discovering music content in a social network site is the ability to search and follow connections within the application (see Appendix C-2 for the chains of evidence and Table 5-3 for counts based on mentions across case sites). Users actively search for specific profile pages to add to their timeline. This enables users to follow the activity of other profile pages. There are numerous instances in the evidence which display this type of affordance. Four themes emerged from the interview evidence based on the ability to search and follow connections and the reasons why users undertake the activity: (1) to learn about new artists for music content and updates, (2) to follow known artists for music content and updates, (3) to follow music-related profiles for music content, (4) to follow profiles based on tastes and reputation that are learnt over time by the user or are based on recommendations from trusted sources.

AFFORDANCE A MENTIONS					
Theme Description	**Twitter**		**Facebook**		**Total Mentions**
	AP	**GM**	**BK**	**PR**	
Learning about artists for music content and updates (generally new artists)	1	3	3	-	7
Following artists for music content and updates (generally known artists)	1	1	3	2	7
Following music-related profiles for music content and updates (not artists directly)	1	5	2	3	11
Following based on tastes and reputation (generally built over time or from recommendations)	2	11	-	-	13
Total Mentions	**5**	**20**	**8**	**5**	**38**

Table 5-3: Affordance A Mention Counts

Users can search for a profile page of a new artist they have just encountered, with the intention to learn more about a band:

> ***AP1:*** *There have been many times where someone will suggest an artist to me and I'll go look them up on Twitter and start following them. Usually this is the first step I take to learn more about that individual or band.*

They can follow these new artists to discover music content and stay up-to-date with a band's activities; like events and new releases. One respondent (GM1) finds Twitter useful for following bands in order to access posts with information about gigs, album releases, about production or other band activities. This lets them "start building up there with them" indicating an evolving relationship between the band and the music fan based on continual interactions.

In other instances the bands are already known to the user, and they search and follow a band that they already like, also to keep abreast of current activities. One user (PR4) emphasised keeping up-to-date with the band's activities as opposed to their music. They stated that because they are already a fan of the band they do not need clarification about their music and whether or not the user is interested in it, but instead want to form closer relationships. These relationships enable users to directly interact with artists. The artists share information and content about upcoming events and music, which is aggregated into their follower's timeline or newsfeed. The connections that are formed facilitate a person to build a relationship with their chosen artists; directly interacting with the artists' online persona.

Additionally, users may follow music-related profiles, from blogs, magazines, and newspapers to record labels, promoters, and other music industry-based profiles. These are more general in nature than following specific artists but can also be based on music tastes and posting reputation. A user's activity feed is a mix of different influences with some emphasising music sources and others following friends or more general profile pages. A user tailors the feed for their own purposes and has control to some extent over what kind of content they access.

By following many different types of profiles a user can find new music in their activity feed very easily. This is a very important use of a social network site for discovering music. By forming connections and creating those links, the user's activity feed has access to a variety of content from a variety of sources. These sources are specifically chosen by the user based on a variety of factors; whether it is an artist that they already like, an artist they want to find out more about, a person who blogs about music, or a dedicated music newspaper section. The ability to aggregate this content into an activity feed for an individual enables a user to encounter music on a daily basis and is an important first step in building a profile.

> ***GM4:*** *Twitter is just an extension of the Internet really. So blogs that I find interesting that put out content that I am likely to want to hear about – I will follow there Twitter feed, and it's the same with producers that I particularly like if I really want to know if they bring out something new I'll follow them as well, and then I've got plenty of friends who are quite interested in music as well so it's just a nice combination. So it extends Internet, it's just very easy little bite size packages of content you don't need to spend half an hour reading, you can get your 140 character version sandwiches and you can go and read the full version online.*

The person above also uses a variety of sources in their Twitter timeline. They go in search of profile pages of individuals that they have heard of, that may have websites they can visit externally to Twitter but are convenient to access via Twitter. Facebook also has a variety of music-specific pages that can be added to a timeline:

> ***PR5:*** *There are pages that I would like and I kind of go through them. There is one called 'Panorama Bar Music' and it's like the Panorama Bar in Berlin and it's just some guy that goes there every night and just puts up tracks that he recognises and stuff from different DJs that are playing and yeah, that's a really good one to hear*

stuff. It's always really random and it kind of spans quite a big area. That's probably one of the best pages.

Finding and following these pages opens up access to lots of content and a user has the option to view some content within the application or follow links to external websites.

But what about in the beginning, when a user has no connections? To build a profile a user will initially follow known individuals that are accessible. As relationships evolve between a user and their connections, they will start to follow and unfollow pages based on reputation and shared tastes, which is relevant whether following individual users or a favourite band. In some cases users will actively seek profile pages to connect with, but as a profile grows they may start encountering suggestions while browsing their activity feed (*i.e.* Affordance D). A Twitter user displays his confusion in the statement below at how his connection list has grown:

GM2: *What I can't really work out is how to know who to follow, that's the hard part. Like I don't know why I would have followed that person in the first instance or how I came across them. I think when you join Twitter first you probably know someone that was on Twitter that told you 'Twitter is great!' so like two years ago I would have gone on and gone through all the people they follow, followed a few of them, like that is probably how it happened. That's probably where the missing link is, there are people on Twitter that are sharing great artists but how do you find them? I happen to have one or two of them in my Twitter feed but is that by accident? I don't know.*

A user will start by searching for the familiar, which will eventually lead them to a discovery and then further search for relevant profile pages. They will also continue to search for specific artists or profile pages based on online and offline information acquisition. As one user (GM3) put it "Twitter is what you make it, the art of looking out for who to follow is one that a lot of people haven't got". It begins with searching for known elements and expanding from there; search can become more focused but can expand into surprising encounters.

GM3: *There's a little bit of an element to it in that you have to know who's good, you have to know the good stuff, to get to the good stuff, but you kind of prime the pump once you have started; following somebody interesting and you spot their conversations, and you see who is interesting that they are having conversations*

with and it goes onwards and onwards. It sort of balloons out and before you know it you're in contact and in conversations with somebody that you never dreamed you'd be talking to and you're finding out stuff that is completely outside of what you would have thought of looking for.

An important aspect to this is the formation of beliefs about the reputations of existing and potential connections based on posting activity. As one respondent (GM4) put it "it's sort of a natural selection process over time", users follow profiles based on interests and over time form beliefs about what these users post and what is deemed relevant.

As these beliefs are formed a user will build a collection of core music sharers within their network. They follow people because of shared tastes, which enable them to discover content that may be of interest to them, which is very pertinent in the context of music seeking. Music tastes are based on personal preferences so it is important to be able to find people that share your interests. Once you have connections that share your tastes and post about music it becomes easier to find other bands through them. One respondent (GM1) has a lot of musician connections and finds a lot of new music and new bands through what they post.

But as you build these connections based on your interests and reputational beliefs, a user's activity feed may also become very restricted because of this. Many of the interview respondents mentioned not being able to search properly in the network, with too much content to wade through it had become difficult to find relevant information in search results. In a similar manner is the opposite effect, that of an activity feed that has become too narrow, because it is filled with only very specific people – based on specific interests. As one individual succinctly put it:

GM6: *You do have to be kind of quite smart about the way you use [Twitter]. I mean I think one of the disadvantages of social media as a source for [music] is it's kind of the other side of the coin to getting rid of the A&R man sitting on the shoulder, that kind of level of quality filtering has disappeared…you need to know almost what you are looking for before you go in there and hence that is why I kind of tend to rely more on recommendations from other people in the first instance and why you know I might pick up a band from a random Last.fm playlist that has come up that has interested me and I will look for them to see if they have a Twitter account and then follow them. So yeah, the downside to that is that you find yourself*

falling into the filter bubble trap, you know where you get quite focused because you are just drawing from people with similar taste.

This is true too in the case of Facebook. It is difficult to browse generally for music within Facebook, but if a band is known to you, whereby a band is discovered – either elsewhere externally or encountered via the activity feed – a person can then engage in further search to locate the band's profile page to connect with it. It is valuable for a user to be able to follow a band so as to access their activity and add it to their timeline.

BK1: *If you like their page you get information on tour dates, when they post a comment you can actually comment back with them and some bands particularly a lot of the major label bands will comment back, like your comment and stuff like that. They'll also post other bands that they like and you can interact by liking that, and just tour dates and album notices as well.*

Forming connections in Twitter varies slightly from Facebook. Facebook focuses fundamentally on known connections – friends, family, *etc.* From this core network users can 'like' public pages. But there is a core group of 'friends', based on some pre-existing relationship. Twitter enables users to search for and connect with unknown individuals solely based on shared interests or some other specification. Their activity feed can be tailored to their personal preferences far more easily – enhancing the role that reputation plays in Twitter when garnering followers. People choose to follow Twitter profile pages for specific reasons, whether a figure head or just an individual who posts interesting things. Facebook is divided into reciprocal relationships and following public pages, roles far more defined than in Twitter.

Reputation plays a part in Facebook also, but because of the nature of Twitter, when searching to follow someone or choosing to continue following them, posting reputation and self-presentation has more of an impact.

GM3: *When you are relying on user-generated content you don't know what they're going to do, the whole – like every word could be a hashtag or there could be no hashtag. So I think Twitter is based on reputations and if someone has done something that benefitted you before then all of a sudden they have way more clout with you…*

Connecting in Facebook has more to do with receiving recommendations from the core reciprocal network and displaying to this network your 'likes' and interests. 'Liking' in Facebook is more active, it promotes your interests to your network and shares this activity. When following in Twitter, your followers are not notified that you have begun following new people; it is more focused on adding this content to your activity feed because it might be of interest or value to you.

To conclude, the first steps in discovering music occur mainly when a person decides to form a new connection. As connections grow so too do the chances of discovering content.

> ***GM2:*** *I suppose you do have to seek it out but it kind of happens by default because of the people I follow [discovering music]. But like, day one I would have decided to follow this person but they are not necessarily occurring at the same time. I would follow someone a year ago and they mightn't share someone I like for a few months.*

Searching for pages to connect with, form the building blocks of a person's profile and activity feed. As the connection list grows, profile activity is aggregated enabling a user to browse their personalised activity feed. Though the social networks in this study were less conducive to searching randomly for bands – once connections were made discovering music content became inevitable. Thus, the following affordance model is proposed based on the findings.

Affordance Model A

The ability to search and follow connections (Social Connectivity) enables a user to search (Actively Seek) for profiles to add to their activity feed (Content Aggregation); by forming connections a user enhances their profile (Profile Building):

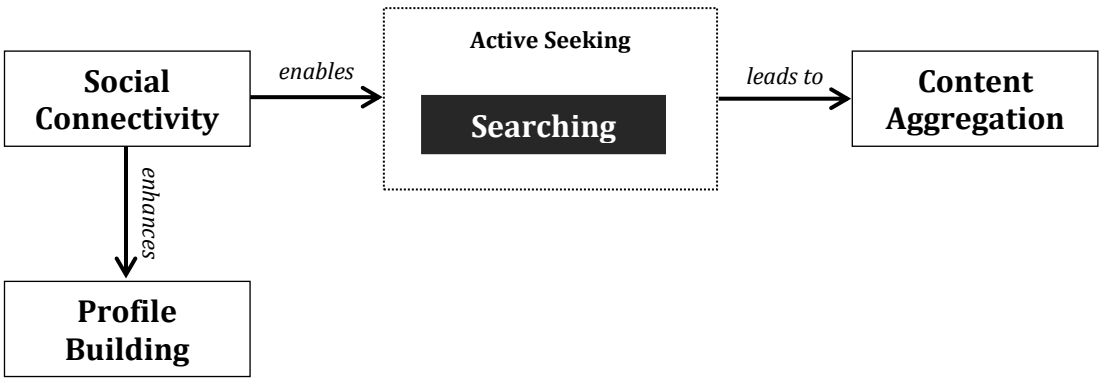


Figure 5-2: Affordance Model A – Connection Search and Follow

The affordance model depicts the interaction between the technical capability to form social connections in an SNS and the resultant content aggregation and profile building. By searching for and forming social connections a user personalises their activity feed and has access to streamlined content. Thus, an increase in the number of connections formed results in an increase in accessible content. Additionally, new connections enhance a user's profile building – by forging connections users inherently express identity and tastes and create new opportunities to form connections and access diverse content. The following section outlines the affordance to search for connections without forming a connection and instead exploring the profile activity of other users.

5.2.2.3 Affordance B – Connection Search and Explore

The second affordance delineated from the findings consists of searching for a particular connection with the intention to explore the content on the profile page (see Appendix C-3 for the chains of evidence and Table 5-4 for counts based on mentions across case sites).

AFFORDANCE B MENTIONS					
Theme Description	**Twitter**		**Facebook**		**Total Mentions**
	AP	**GM**	**BK**	**PR**	
Browsing content on page (exploratory in nature)	2	3	3	4	12
Seeking specific content on page (directed in nature)	2	-	1	2	5
Re-finding content (directed in nature)	-	-	1	2	3
Total Mentions	4	3	5	8	**20**

Table 5-4: Affordance B Mention Counts

This activity was less pervasive than searching for a connection with the intention to add them to the activity feed, but may be a first step in deciding to follow a connection or for exploring a specific profile pages' activity and content updates; in the latter case users may or may not have already formed a connection. Three themes emerged for this affordance: (1) users browse content on the page in an exploratory nature, (2) users seek specific content on the page in a directed manner, and (3) users direct their search to re-find content previously encountered.

The first instance of this activity is exploratory in nature and involves the user searching a connection with the intention to browse the page. One respondent (PR2)

mentioned visiting a record labels' profile page to see if they have posted about other bands or about new music. Users check these pages in an exploratory way, browsing for content that may be of interest to them. This will often lead them to discover new content or sampling activities.

> ***BK3:*** *If I know that I have a friend with whom I would share musical taste. Then sometimes I would go onto their profile and check if they have uploaded any interesting music videos.*

In other instances a user will be seeking specific content on the profile page, this activity is directed in nature and the user states that they have something in mind when visiting the profile pages.

> ***AP3:*** *Recently, when I had heard mention of an Iggy Pop album that somehow had slipped past me, I used Twitter to find Iggy's website [profile page], and also to see what gigs/interviews he was promoting at the time.*

Sometimes scanning the activity feed of aggregated connections is not enough to access desired content, a user will sometimes visit a profile page to view updates that concern specific artists or people. The nature of Facebook in particular does not lend itself to searching for topics, so when information about a specific artist is required, it is more appropriate to visit their profile page and browse for content whilst within the social network. One respondent (PR6) reported visiting a producers page to find a specific songs on their profile page. Though facilitated, this activity was reported less by Twitter users. Twitter enables users to search for content in public posts – a function not supported by Facebook. Consequently, because of these limitations this activity was far more common in Facebook than in Twitter.

One user stated that once you have a band in mind and you search for that band, further exploration and discovery may take place because of the nature of the system. Searching leads to discovery and/or sampling which then leads to a further exploration and discovery cycle.

> ***PR2:*** *I could go to one of those bands pages and look at the bands that they have been putting up messages about and videos and things like that. So, the funny thing with Facebook is that once you log on you are kind of stuck there, if you know what you are looking for it can just snowball out of control because this band is*

recommending this band, this record label is recommending this band, or this band recommends this record label, and you are clicking links constantly.

In a similar vein, Twitter has also added the ability to view media within the application (where once you were directed externally), users can view images and videos within the website, enabling users to browse a profile page's media gallery. One respondent (GM2) mentioned visiting a music-specific profile page and browsing through their music videos – but did not emphasise it as an effective mechanism to browse for music. They stated that it is only useful if you know a profile page only posts music information and content, implicating reputation and prior knowledge for this activity.

Lastly, users mentioned seeking specific content that they had previously encountered; this was only evident in Facebook. In this case users mentioned wanting to re-find content, an activity also directed in nature. As the respondent above stated, Twitter is not really suited for browsing for music content, likewise the following Facebook user stated that Facebook is not suitable for searching specifically, but could be used to re-find content:

BK6: *If I like music blogs on Facebook say, Nialler9 would be the big one that I'd always check…if he put up a video maybe and I remember that was good then I'd go to his Facebook page and look for it but I wouldn't actively go searching on Facebook for music because I don't think it's the best place to look.*

Another user (PR3) states that the intent to find previous posts in Facebook is not without difficulty, because of posting frequency and the chronological posting order. However it can be done, though it is not ideal. The particular instance the user reported was motivated by the user remembering a previous post by another user and wanting to find a particular piece of music content, even though it could have been from months ago and thus not easy to find in the chronologically organised activity feed. This interaction illustrates the immediacy of social network site content, and the real-time interaction that occurs, which implies that you must interact daily to keep up-to-date with content or miss it altogether.

Twitter too with its immediacy is more appropriate in real-time and is not conducive to finding older posts. Searching specifically for music content as opposed to music connections is not an intuitive task – in contrast with browsing the activity feed for

content and encountering music inadvertently (though timelines can be tailored based on connections to be more efficacious for this). In summation, exploring music specific pages occurs when a user has something in mind and is usually directed in some way, either to find content about a musician/band or to explore in a specific way. Thus, the following affordance model is proposed based on the findings.

Affordance Model B:

The ability to search connections (Social Connectivity) and browse the profile page or search results (Content Aggregation) enables a user to explore in a directed manner (Active Seeking):

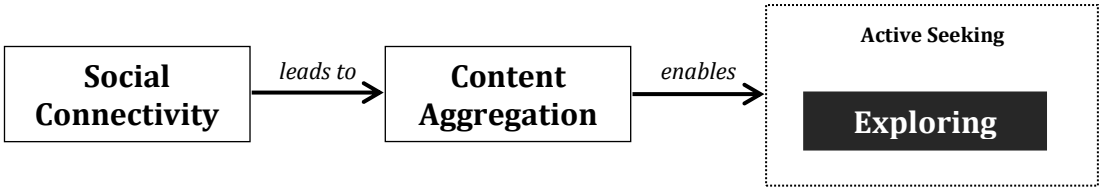


Figure 5-3: Affordance Model B – Connection Search and Explore

The affordance model depicts the interaction between the technical capability to search for social connections in an SNS and the resultant content aggregation and exploration activities. By searching for social connections a user accesses the public profiles of users within the system. By accessing these profile pages users can explore the activity of others users and access content that may not be currently present on their own activity feed – either due to a lack of a direct connection or because of the time in which the content was posted and when the user has been active on the SNS. The following section outlines the affordance to search for key terms in an SNS as opposed to social connections.

5.2.2.4 Affordance C – Searching Key Terms

Searching for key terms or specific music content in user posts was only evident in Twitter (see Appendix C-4 for the chains of evidence and Table 5-5 for counts based on mentions across case sites). Facebook is limited in this way as it only allows people to search for other people and pages[6]; it does not enable users to search content of posts, and therefore only negative associations were revealed in this context (as discussed in Section 5.2.1). Two themes emerged for this affordance: (1)

[6] Facebook has recently enabled users to search for 'hashtagged' terms, though it has not been promoted and does not seem to be implicit to sharing content; as with Twitter.

users browse connection "mentions" in the list of posts returned from search query and (2) users search for specific updates and trends.

AFFORDANCE C MENTIONS					
Theme Description	**Twitter**		**Facebook**		**Total Mentions**
	AP	**GM**	**BK**	**PR**	
Browsing "mentions" in tweets	2	5	-	-	7
Searching for updates or trends	-	4	-	-	4
Total Mentions	2	9	-	-	**11**

Table 5-5: Affordance C Mention Counts

Twitter is based on user-generated content and users' posts can be tagged in specific ways. A post may contain a user-generated tag, either tagged content/term – known as a hashtag (*e.g.* #MusicDiscovery), or it might link a user to a post – known as a 'mention' or 'reply' (*e.g.* @amandapalmer). These tags are aggregated by Twitter and can be searched for by users. Words and phrases that are not tagged can also be searched in Twitter. A list of tweets with a term or tag will be presented to the user via a timeline.

One Twitter user has searched for a band but ended up browsing through the mentions of other users' tweets, this directed exploration enables a user to discover content and engage in further music seeking.

> ***AP1:*** *Usually I just use the search function or the hashtag box. Oftentimes I'll go to search a band and end up on a page that lists people mentioning them in tweets. That has also been an effective way for me to find songs because people will post something like, 'Listening to Bottomfeeder by Amanda Palmer!' and then I end up looking up that song and listening to it too.*

Users search for specific terms in order to access a timeline of other users posts relevant to the search whether a music genre, music term, band, album, *etc.* The user's browse this timeline of mentions and tagged terms which results in music discoveries, which may lead to sampling or further seeking activities.

> ***GM1****: If I search for something normally to discover I try terms closest to what I am looking for; the band, the production, the words or names of the songs, you will find them by discovering the songs in other peoples' tweets.*

This directed search enables a user to view conversations and interactions with both hashtags and mentions that lead a user to explore music content, all within the

Twitter mobile application. Often times these searches are associated with trending topics or events that are unfolding in real time.

> ***GM5:*** *Unless there is something actually actively happening that I wanted to find out more about, if there is something breaking or whatever. I'd search hashtags basically, that'd be one of the more common ways, say Jools Holland that's be one I'd always use.*

This allows users to keep up-to-date with any current music news or events. Twitter is particularly appropriate for real-time information and being a part of on-going conversations as events unfold. Users may search specifically for this information or encounter them in their timeline inadvertently. Thus, the following affordance model is proposed based on the findings.

Affordance Model C:

The ability to search key terms (Content Discovery) enables a user to search for specific content (Actively Seek) which leads to the aggregation of content into an activity feed (Content Aggregation):



Figure 5-4: Affordance Model C – Searching for Key Terms

The affordance model depicts the interaction between the technical capability to search for content in an SNS and the resultant content aggregation that occurs. By searching for key terms a user accesses the content of public posts from across the entire network, instead of being restricted specifically to the connections that they have formed and the way in which it is presented by the system (for example chronological or personalised activity feeds). By searching for specific content users create an activity feed based on the search terms used and access content from outside of their network. The following section combines the three active seeking affordance models into a single model representing the relationships between the affordances and the activities enabled.

5.2.3 Active Seeking Activity-Affordance Relationship Model

This section presents a cumulative active seeking model combining the affordance models for affordances A, B, and C from previous sections. This model displays the relationships between the (1) affordance hierarchies and relationships and (2) their relationship with user activity; in this case active seeking tasks. It displays a more comprehensive examination of affordances and their interactions, highlighting the dependencies between the affordances and between the affordances and activities displayed in Figure 5-5.

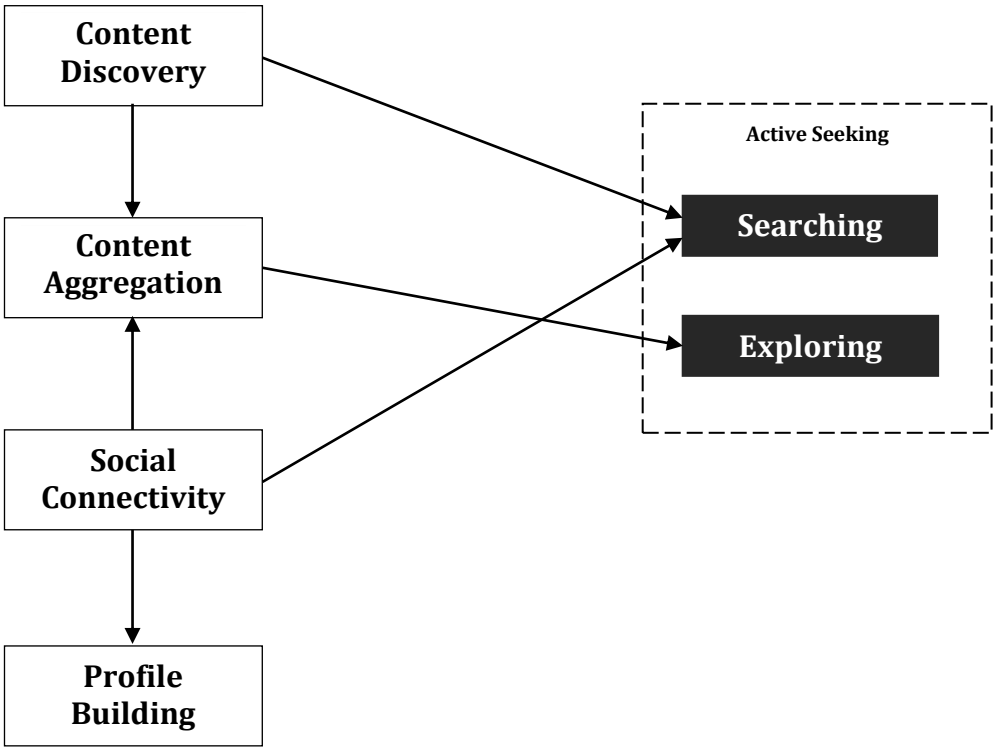


Figure 5-5. Active Seeking Activity-Affordance Relationship Model

Both *Social Connectivity* and *Content Discovery* enable a user to search within the system which results in the aggregation of content. Therefore *Social Connectivity* and *Content Discovery* results in *Content Aggregation*. By aggregating content users are enabled to explore in a directed manner through extrinsically motivated search, directed by active seeking behaviours, or intrinsically motivated experiential exploration, which results in passive encounters. Additionally, by forming connections users are building their profile and personalising their activity feed. Thus, *Social Connectivity* enhances *Profile Building*. This model presents one aspect of the actions afforded to individuals in social network sites based on the evidence

for active seeking. The following section presents the findings for passive encountering activities and the associated affordance models.

5.3 Passive Encountering Findings

This section first presents the passive encountering activity model. Each model is broken down into three phases based on the initial interaction, the outcome of the interaction and any further directed activity. Three affordances for passive encountering in SNS are presented based on the findings: (d) browsing activity feed and discovering content and (e) directed connection interactions. Evidence for each affordance is presented in chains of evidence tables (see Appendix C for full tables) and affordance models representing the technology and activity interplay is displayed and described.

5.3.1 Passive Encountering Process Model (RQ2)

This section proposes a passive encountering process model based on the passive encountering user perspective proposed in Section 5.1.1. This model represents the consumption tasks undertaken by users to discover content in the context of the selected social network sites when a user is receptive to music content.

Specific tasks have been assigned to particular phases in the activity models. The phases represent the intentions at the beginning of an activity (through specific user tasks) and the resulting phases thereafter, representing potential actions. Each type of activity is described in more detail based on Figure 5-6 and the phases in the activity models are described in the context of consumption tasks.

In contrast with active seeking, passive encountering represents the process of discovery when a user does not have anything in particular in mind. Users engage in general browsing behaviours in social network sites and are receptive to content (not a part of the music consumption cycle and general in nature). Users may then passively encounter relevant or interesting content and thus begin the music consumption phase. These passive encounters may in turn lead them into an active phase of seeking after a discovery has been made.

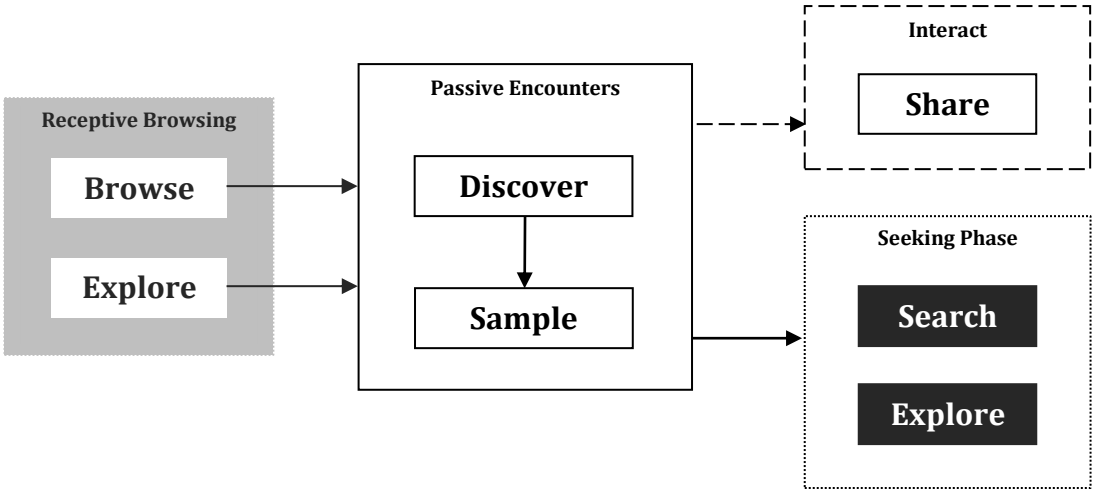


Figure 5-6: Passive Encountering Process Model

Phase 1 – Receptive Browsing: A user will engage in browsing or exploring behaviours by interacting with their profile or activity feed/timeline in an indirect manner (may not be a part of the music consumption task and hence in grey).

Phase 2 – Passive Encounters: An individual will encounter interesting content whilst not specifically seeking it. These discoveries may or may not involve sampling. The user may be directed to an external site or may remain within the social network.

Phase 3 – Further Directed Activity: Passive encounters may lead to further active information seeking (internally or externally) or to sharing the content discovered (internally or externally).

5.3.2 Passive Encountering Affordances (RQ3)

This section presents the evidence for discovering content in social network sites based on passive encountering. Passive encountering has been categorised into two types of affordances based on the findings:

Affordance D – Browsing activity feed and discovering content

In this instance users will browse their timelines and encounter content that is posted in their network. As users browse their activity feed they will discover content which will lead them to follow links either internally or externally to the site.

Affordance E – Directed connection interactions

In this case users will receive directed suggestions or recommendations from connections in their network. They may be private or public interactions with other

users. This type of interaction is directly related to content sharing activities and is briefly discussed in the context of passive encountering.

These affordances are discussed in the following subsections and the evidence from the interviews is presented.

5.3.2.1 Affordance D – Browsing Activity Feed and Discovering Content

Browsing the activity feed/timeline to discover content is a prevalent activity in the case study sites (see Appendix C-5 for the chains of evidence and Table 5-6 for counts based on mentions across case sites). Six themes emerged for this affordance based on: (1) general discovery behaviours using the activity feed or timeline, (2) closer relationships formed because artist-based posts, (3) the nature of discovery is immediate and facilitates access to new and diverse information, (4) social influence and reputation beliefs evolve with continuous interaction with the activity feed and the access to content posted, (5) discoveries often lead to other activities like sampling, searching, exploring, further discoveries, and (6) media is embedded and integrated into the social media platform which enables sampling within the technology even from external sources.

AFFORDANCE D MENTIONS					
Theme Description	**Twitter**		**Facebook**		**Total Mentions**
	AP	**GM**	**BK**	**PR**	
Discovering content via the activity feed/timeline (general discovery)	5	9	8	11	33
Artist-based posts (closer relationships and interactions)	1	2	2	2	7
Nature of discovery (immediacy/new/diverse)	2	7	4	5	18
Social influence and reputation (continuous interaction)	4	11	9	10	34
After discovery activities (including: sampling, searching, exploration, further discoveries)	2	5	3	4	14
Integrated technologies (including applications and embedded media)	-	-	1	5	6
Total Mentions	14	34	27	37	**112**

Table 5-6: Affordance D Mention Counts

In contrast with the constraints for active seeking in social network sites – passively encountering content via the activity feed is extremely relevant for music discovery according to the respondents. This is a continuous interactive process between passive encounters and active seeking, and can begin with varying combinations of

the following activities: a user discovers content, leading to further exploration and search, which may enable further discoveries. As one Twitter user states:

> ***GM1:*** *You discover them on Twitter, you follow the band on Twitter, you realise they are interesting to you, and then they post on Twitter; when their gigs are, when their albums are coming out, about their production or what they are doing...*

Browsing the activity feed facilitates users to quickly view all of the activity of the profiles they have chosen to connect with. In Twitter a user has the ability to tailor their activity feed based on who they follow, fully controlled by the user according to tastes and preferences. Facebook also enables users to tailor the newsfeed, once a connection has been formed, whether friends or public pages, the profile's activity is automatically displayed on the newsfeed (with the option to hide this activity from their feed).

It became obvious that the choices made in the social network site about who to follow directly impacted the ability to discover relevant content. This created a link between the time a user actively searches for people to connect with and the ability to passively encounter content down the line. But it also requires insight from the user over time as to who posts relevant content. As one Twitter user stated:

> ***GM2:*** *I think it comes back to who you are following. No offence to my little brother like but if my little brother said 'this is a class song' as he would in his language, I probably wouldn't even click into the tweet because he is just an annoying little kid you know, and then you have people that you don't even know. Like I don't know is it connected to how many followers they have or is that they have done something to help you before, probably both.*

It also means that new diverse people are accessible to a user, by opening users up to new and interesting content. This in turn helps them to step away from a personalisation/filter trap that may transpire when following very specific types of people. As users in Twitter have the ability to follow other individuals like themselves (not a part of their existing social network) as well as music-specific pages, they access new types of interactions and content. In contrast, Facebook generally promotes known 'friend' connections and subscribing/liking public pages (artists, companies, blog pages *etc.*). Though these do open users up to content, it is not at this diverse individual-level, which Twitter seems most capable of.

> ***GM3:*** *People from outside my usual frame of circles are very helpful. That's what's good about Twitter, if you follow people who are very different from you or from a very different world from you, you can get a kind of insight and an introduction to things you would never normally think about.*

In contrast with this view and because of the ability to personalise the timeline, a constraint of excessive filtering may occur. While it is beneficial to tailor an activity feed to access ideal content, it can become too tailored and this excessive filtering becomes an issue. Consequentially, there is a balance between what the user above says for accessing diverse opinions and also streamlining the activity feed into something that is relevant to the individual.

> ***GM5:*** *[Twitter] strengths, the immediacy, the way you can actually pick the information you want, you don't have to listen to a wash over from people you don't want to hear from, drawbacks, it's probably addictive [laughs], I suppose you can probably get caught with a small group of people you follow who will always have the same opinions as you rather than a diverse set of opinions, that's probably not good either.*

In Facebook there is a benefit to the reciprocal relationships from an existing social network. User's in Facebook trust their friend's recommendations as they already understand their social and cultural influences. A user has direct access to their friends and their opinions; they can make judgements about content right away.

> ***BK2:*** *It's great because I trust a lot of my friends. But also I really like that I am getting exposed to this music that I probably wouldn't find otherwise and it's a great way of sharing something great that you have just found. And it's not kind of advertising, you kind of can't trust – sometimes – the Internet and what it throws up at you, when you have searched for something, whereas at least when it's a friend of yours putting it out there you are more inclined to trust their judgement and know that they are putting it up there for general use, they actually think it's good.*

In Twitter because of the prevalent unknown connections, time and reputation play a distinct role. Many users in Facebook have pre-existing beliefs about the content their friends post but as they continuously interact with these connections and when they form one-way connections by 'liking' pages, they also form beliefs about the profiles they have connected with. Users create and evolve beliefs based on continuous social interactions.

BK6: *Like if someone puts up a good song and puts up another one I'd check it out. If someone puts up a bad song I might just kind of say 'oh I'll leave that slide because it wasn't great the last time.' Yeah, just if they keep putting quality songs up I'll keep clicking.*

Social network sites facilitate users to create an online persona and gain social influence through self-presentation and self-disclosure. Relevant to both sides of the connection relationship – for the user themselves and the people/pages that they follow. As one user (GM5) puts it – "it is based on their online activity", as well as whether or not they are specifically based on sharing music content, but essentially the user knows over time which profiles post relevant and interesting content and uses this when making decisions about investigating content further.

In some cases it was evident that users had music in mind when browsing their activity feed. But in other cases the content was encountered serendipitously. Many users highlighted this serendipitous discovery, using phrases like "it just seems to pop up regularly" and "I would stumble across" it. Therefore, for browsing the timeline, activities may be semi-directed with music in mind, as evidenced below:

BK2: *The only way I browse for music is through the newsfeed, if I ever go on that and go 'oh did any one put anything interesting up?' I normally kind of skip through them, but the odd time if someone has a music video up I might be inclined to click on that.*

Or they may not seek music specifically:

AP5: *Not really, I am sort of new to Twitter, I have kind of always been on it but I have never really spent a lot of time on it. I haven't really done any surfing for music on Twitter but anytime, like as I said that someone mentions something music wise I usually will check it out based on their tweets.*

What makes a user stop and read a post often depends on the type of content (text-based, links, images, hashtags, mentions, *etc.*) and the person who has posted it. When browsing with music in mind, the user below specifically stated that they watch out for a certain style of post, certain phrases catch their interest or when certain musicians are mentioned or retweeted.

AP4: *Just if the tweets make it sound interesting, if the tweets are definitely like 'listen to this!' or 'this is something astounding I've heard.' If people I'm following*

have those kinds of tweets or re-tweets something from a musician then it just peaks my interest.

Another Twitter user reiterated this by emphasising the trust they have for certain social connections. In this case by following a musician whose music they like, they have a new source for music consumption. Rather than recommendation algorithms based on a user's activity like the ones used in Spotify or YouTube, a user is accessing content based on who they have chosen to follow, they then decide to click the links based on the reputation of these connections, either through some pre-existing criteria (like the artist/fan relationship) or reputation that is built over time through continuous interactions. This also forms closer relationships between artists and fans.

AP6: *I trust the artists that I follow to send me their recommendations. If Amanda Palmer writes 'Check out this new single by ___' then I am definitely going to. I don't look at it like artist/fan relationship, but more like 'trusted music critic / music lover' relationship.*

Facebook users also enjoy this social link, by following friends and artists they can continuously encounter new music. It also allows them to keep up-to-date with what may be happening in certain music circles as "it's a good way of sitting down and checking out what humans are listening to" (BK5). Music has many genres and fan bases, from mainstream music to niche tastes, SNS enhance this ability to find content that otherwise would be difficult to access. The following user works in a music shop and therefore deems it important to know what is appealing to customers. He stated that it has helped him to track trends and find out what people are excited about, so that they can order it in.

BK5: *I mean you can see what people are talking about as well and it's good to get an idea of what's a buzz at the moment and for a business that's kind of – that's quite important – obviously we would like to create some trends as well; it's a bit more difficult now. It's good to see what people are talking about, and if people are bigging up a title and we get to hear it and we like it – it's great for us when it comes to presales we can get a lot of extra stock in and…boom…get it up on the Facebook page and hopefully create some interest in sales out of that. So yeah that's quite important.*

Facebook has given this business a direct link to their consumers and their interests. This relationship is beneficial to the music shop and it helps them make better decisions about what stock to order and to keep track of what music is gaining popularity. Music is an experiential product dependent upon cultural and social influences, by letting both consumers and businesses engage in music conversations and word-of-mouth exchanges it enhances the availability and propagation of information.

This type of affordance enables users to browse the timeline/activity feed in a general way, either browsing for music or just checking out the network content. But it has also facilitated closer relationships between musicians and music fans, music-specific businesses and their consumers, and between music fans and their friends or connections. Because of the nature of music and traditional forms of music consumption, the technical features of SNS directly impact the consumption of these goods, because of the ability for word-of-mouth exchanges, sampling activities, sharing links, music discussion, and organising live events amongst a myriad of music-related activities.

The benefit of using an SNS is that it makes it very easy for users to encounter content. Some of the users who identified as passive in their music consumption pointed out how easy it was to stumble across music without having to go seek it themselves.

> ***PR4:*** *I don't go out to find music via Facebook, but I have a couple of friends – huge music nerds- who share, watch some YouTube and share it and I will then get it that way. I'm not going to find it, it comes to me.*

These users do not engage heavily in music seeking activates – but enjoy the representation of music in their activity feed. Without any effort they are discovering new music. They let people that they trust and who are more actively engaged in music seeking do all the work for them: find it, share it and link it – for others to see.

> ***BK2:*** *As I said if they put up a new video or something like that I would be inclined to look at it. Probably more through Facebook because it's just presented to me, it's kind of a lazy way of having all your interests in one place. Because obviously it wouldn't occur to me to Google them every day yet if I go on Facebook and they put something up like 'oh we are doing this a gig here' or 'here's our new single' or*

'here's something we recorded yesterday' I would be much more inclined to click on that and have look at it within Facebook.

Users mentioned YouTube, Spotify, and SoundCloud a lot in relation to the type of music links that were posted. This ability to share across various platforms and embed videos and audio into the activity feed has enhanced the music consumption process. Sampling activities occur internally and externally to the platform with this embedding capability.

The youngest respondent from the case study has stated that Twitter and social media have become an important source of music, as some of her favourite discoveries have been made within these platforms. This implicates a change in the way people are consuming music. In the case of the older respondents, habits have already been formed surrounding their music consumption practices and they are complimenting this process with SNS, however in the case of younger users these practices may begin to replace other consumption behaviours, which has implications for the music industry.

AP1: *I've found all of my favourite musicians and songs through the people I am connected to on social media networks like Twitter.*

These platforms have become an integral part of the music consumption process, for both discovering and sampling new music but also the activities after discoveries have been made. Where users seek more information or share the content to their own network. Some users mentioned discovering a new artist and then exploring on the platform to find out more, and if no more information is available the user leaves the platform and searches on Google to find it. In one instance, AP1 reported seeing a tweet mentioning an artist, and clicking on the handle to explore further.

In another instance a user was directed to a YouTube music video, where they sampled the music of the new artists and was provided with more recommendations based on this discovery. After this discovery and further exploration the user bought the album.

BK1: *Well, I remember someone had posted a video to a particular song and I clicked on it and it brought me to YouTube from Facebook, I listened to the song and I noticed there was recommendations on the YouTube site, I clicked one song,*

liked it, clicked another song by that band, liked it, and then I ended up buying the album.

Other activities have led to exceptional cases, where artists live stream performances. The immediate nature of these platforms, especially Twitter, has created these 'of the moment' occurrences. The following quotation is a long extract from one such events:

GM6: *There was a little tweet from Amanda which sort of said something along the lines of right everyone get over to this site now something interesting is happening and it was her, one of her webcasts, and she had just basically…picked this nineteen year old boy up off the street who was a piano prodigy…She was just so blown away she set up a webcast and started broadcasting. Basically the two of them did this sort of two hour recital stroke interview, and it was incredible and it felt quite intimate and very exciting the fact you know that I was able to sit in my living room in Bristol and watch this thing unfolding in Boston live with about another 2000 people watching it and you know people were kind of commenting on the Twitter stream and asking questions, so it became a very interactive thing. And then Amanda produced an album for Tristan which I bought the day after it came out. So that was I think – that was actually one of the first moments when I really kind of got the intimacy side and I understood that aspect that social media can provide.*

These serendipitous discoveries and intimate events create strong bonds between the people who share in this moment. Because of the immediacy of Twitter, events unfolded in real time and provided a platform for a new and unknown artist. It also created intimate relationships between the artists and their fans. As a result, of live streaming (sampling activities) this particular respondent went on to purchase new music.

To sum up, the ability to browse the activity feed and discover new and interesting content is extremely relevant to the music consumer activity cycle. Users are facilitated to form closer relationships with artists, by enabling interactions between once formally separated entities. It also creates new forms of immediate and diverse discoveries and enables users to filter via preferences or open up the options by following new and unknown connections. Social influence and reputation of posters does play a role, which is also very relevant in the consumption of cultural goods as tastes are culturally dependant and influenced by personal tastes. When users

discover content in an activity feed they continue the music consumption process by either continuing to search for more content or exploring for more music content. The SNS also enable users to share discoveries more easily (an affordance discussed in the content sharing findings section). Thus, the following affordance model is proposed based on the findings.

Affordance Model D:

By connecting with users in a network (Social Connectivity) their activity is added to an activity feed (Content Aggregation) which enables users to discover and sample music content (Passive Encounters).

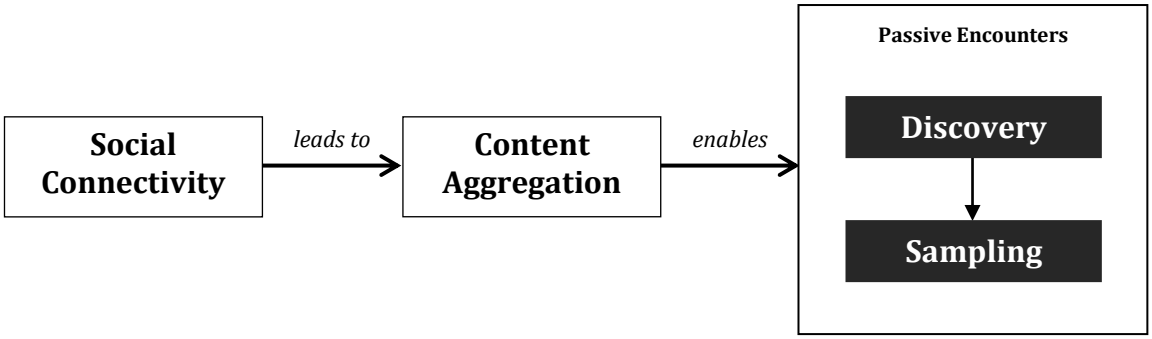


Figure 5-7: Affordance Model D – Browsing Activity Feed and Discovering Content

The affordance model depicts the consequences of forming social connections in an SNS and the ability of users to access aggregated content from these social connections. These connections and resulting content aggregation facilitate passive encounters which enable users to discover and sample content. By forming social connections a user personalises their activity feed and has access to streamlined content. Thus, an increase in the number of connections formed results in an increase in accessible content. The following section outlines the affordance for encountering content through directed connection interactions as opposed to via the activity feeds.

5.3.2.2 Affordance E – Directed Connection Interactions

Browsing the activity feed displays the public posts of a list of connections, however sometimes these posts are directed in nature to particular individuals, either as tagged posts/wall posts (open to network) or private messages directly to a user not visible to the public (see Appendix C-6 for the chains of evidence and Table 5-7 for counts based on mentions across case sites). Hence, two themes emerged from the evidence: (1) directed suggestions and recommendations from connections with lead

to discoveries and (2) discoveries made from direct interactions with a specific group whether private or public (and therefore not a part of browsing the activity feed).

AFFORDANCE E MENTIONS					
Theme Description	**Twitter**		**Facebook**		**Total Mentions**
	AP	**GM**	**BK**	**PR**	
Suggestions and recommendations to/from connections	1	4	10	2	17
Private/Public Groups	-	-	-	2	2
Total Mentions	1	4	10	4	**19**

Table 5-7: Affordance E Mention Counts

These interactions may include shared content which lead to discovery and sampling. In the private groups users interact and share with a bounded group for a specific purpose, sharing content only accessible to a specific list of connections. There is a visible difference between directed messages in Facebook and Twitter. Facebook users mentioned private mail from friends or private groups, whereas in contrast Twitter, though capable of private message, they were not mentioned by the respondents. In order to use 'direct messages' (private mail) in Twitter both users must be following each other, which is not always the case. Facebook in contrast enables users to privately mail each other or join private groups. One user (BK2) reported that they would normally check out music sent directly to them by another user with information like "check out this band they're really good!". This user is encouraged by both the directness of the message and an understanding of a shared interest.

In some cases groups are set up for users to share music content with like-minded individuals who share common interests or want to share in an open way with a group of trusted users.

> ***PR5:*** *I was in America two years ago and we have got this online group there is like twenty of us in there. I know maybe twelve of the twenty but everybody is – putting up tracks that they hear every week. A private group in Facebook, we just call it music dump, like anything, I put anything in there. Like funny stuff, like tracks that I really like or sometimes there is just a vibe going round like hip hop, so I will just put up loads of my favourite hip hop tracks and stuff like that. That's actually really good.*

User's also direct messages in a more general way, open messages accessible by the network also. Through the use of mentions in Twitter, a post can be directed, with a

particular person in mind while also still sharing to the timelines of a user's followers. Facebook likewise enables users to post to a users' profile wall or tag users in a status update. The profile wall posts are visible to users who visit the profile page and anyone who follows that user's activity feed.

> ***BK1:*** *I have a gotten a link from YouTube and posted it on their [Facebook] wall and gone 'listen to this' or something like that.*

The intention of these posts may be to bring the attention of a particular person to specific content – deemed relevant or interesting for that person.

> ***AP2:*** *I send videos and recommendations to friends using Twitter (or Facebook) pretty often when I think they may like the music. Lately I sent Jay Malinowski's videos to a friend who, although she's into hip hop, she also appreciates acoustic music.*

Directed interactions will be most apparent when the evidence for content sharing is presented, as it is inherently linked – user's will in some cases direct messages to a person when sharing content with them and thus enable them to discover content. Thus, the following affordance model is proposed based on the findings.

Affordance Model E:

The ability to connect with other users (Social Connectivity) enables a user to interact with connections (Social Interactivity) which may or may not include the act of sharing content (Content Sharing) all of which enables discovery and/or sampling (Passive Encounters):

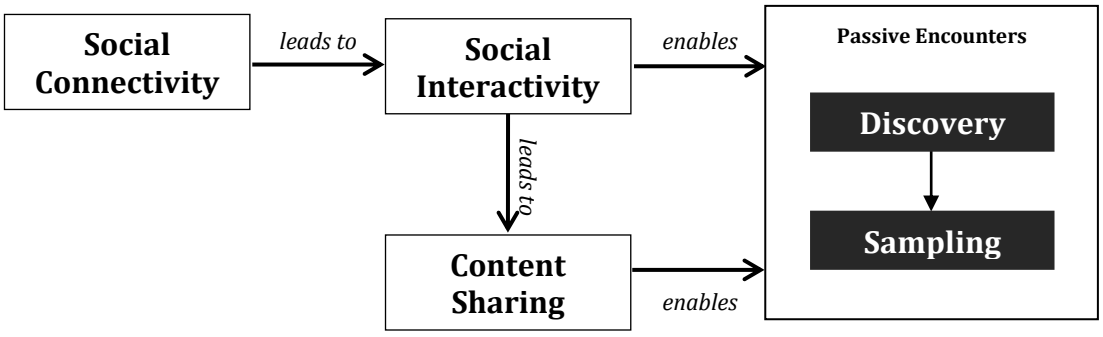


Figure 5-8: Affordance Model E – Directed Connection Interactions

The affordance model depicts the interaction between the technical capability to form social connections in order to interact and share content with others. By forming social connections a user can interact directly with connections and thus

share content directly. By both interacting and sharing content users passively encounter content through their connections without specifically seeking it out. Users leverage their knowledge of others based on a known relationships or profile information and interactions over time and direct information and content based on relevancy. Users who receive content from others assess the content based on reputation and past interactions. An increase in interactivity and content sharing will result in more content exchange and thus passive encounters. The following section combines the two passive encountering affordance models into a single model representing the relationships between the affordances and the activities enabled.

5.3.3 Passive Encountering Activity-Affordance Relationship Model

This section presents a cumulative passive encountering model combining the affordance models for affordances D and E from previous sections. This model displays the relationships between the (1) affordance hierarchies and relationships and (2) their relationship with user activity; in this case passive encountering tasks. It displays a more comprehensive examination of affordances and their interactions, highlighting the dependencies between the affordances and between the affordances and activities displayed in Figure 5-9.

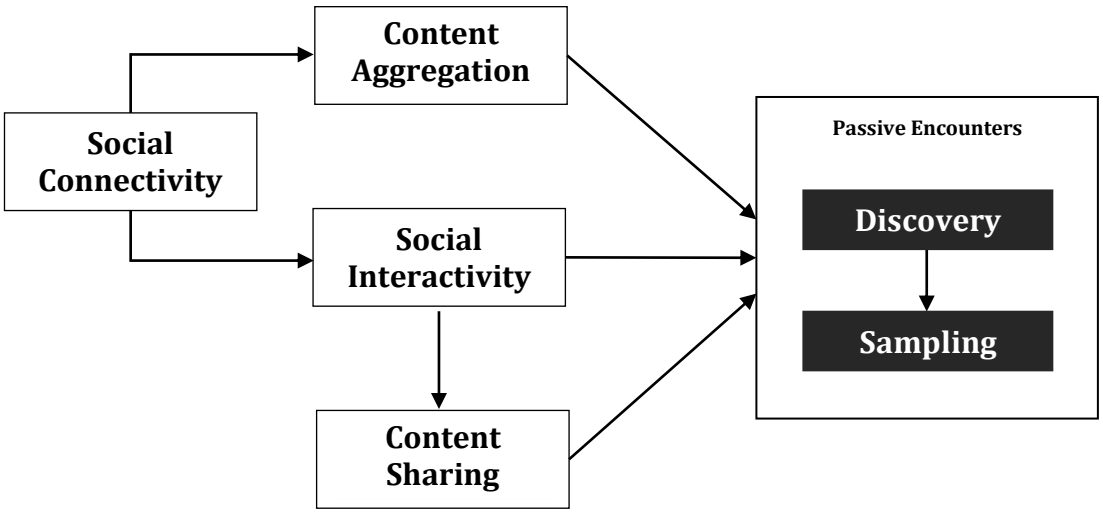


Figure 5-9. Passive Encountering: Activity-Affordance Relationship Model

Both *Content Aggregation* and *Social Interactivity* are dependent on *Social Connectivity*. Users must find and form connections in order to both aggregate content and interact with other users directly. Likewise *Social Interactivity* enables *Content Sharing*, as an interaction must be enabled in order for users to share content

with each other. By enabling users to access aggregated content users are enabled to discover and sample content using the activity feed. Additionally, users interact and share content directly with each other which also enables users to discover and sample content when not specifically seeking it. This reinforces the relationship between increased *Social Connectivity* and an increased ability to access more content through the activity feed, which is related to how many connections a user has formed. In a similar manner, the more active a user and their connections are the more likely users will discover and consume new content. This model presents one aspect of the actions afforded to individuals in social network sites based on the evidence for passive encountering. The following section presents the findings for content sharing activities and the associated affordance models.

5.4 Content Sharing Findings

This section presents findings for content sharing activities. Content sharing activities are based on users' intention to share content in the SNS as well as resulting from discoveries made within the SNS. Four types of sharing user labels are presented based on the type of content shared and behaviours displayed: (1) initiators, (2) recruiters, (3) promoters, and (4) propagators. There are two affordances categorised from the findings for content sharing: (f) creating and sharing content and (g) sharing internal content. The four types of sharers are included in the discussion of the content sharing affordances to highlight where each behaviour is evident. Evidence for each affordance is presented in chains of evidence tables (see Appendix C for full tables) and affordance models representing the technology and activity interplay are displayed and described.

5.4.1 Content Sharing Process Model (RQ2)

This section proposes a content sharing process model (Figure 5-10) based on the content sharing perspective proposed in Section 5.1.1 and any resultant sharing behaviours from the other two perspectives. This process model represents the "initial content sharing" activity based on the following four types of sharers identified in the findings and also any "resultant content sharing" based on discoveries made in the SNS. The following four types of sharers were integrated into the content sharing process model as a part of the initial content sharing phase:

Type 1 – Initiators: sharing external content

In this instance users post content to their network either openly to the network or directed in some way. Content will be shared using external sources. Different types of content are shared with the network including on-going music experiences and links to music content in a number of formats.

Type 2 – Recruiters: sharing live gigs and events

Users post with the intention of attending a live gig or event and promote this event in order to recruit others to join them. They may also just publish the fact that they are attending for reputational or social reasons.

Type 3 – Promoters: sharing promotional material

In some of the cases respondents used the social network site for promotional purposes in a professional capacity. They shared content with the aim to promote their own music or the music of others for work-related reasons. Content type varied based on the situation.

Type 4 – Propagators: propagating internal content

In this case users repost content to their network either openly to the network or directed in some way. Content is shared from internal content discoveries. In line with sharing from external sources, the type of content varies based on the post.

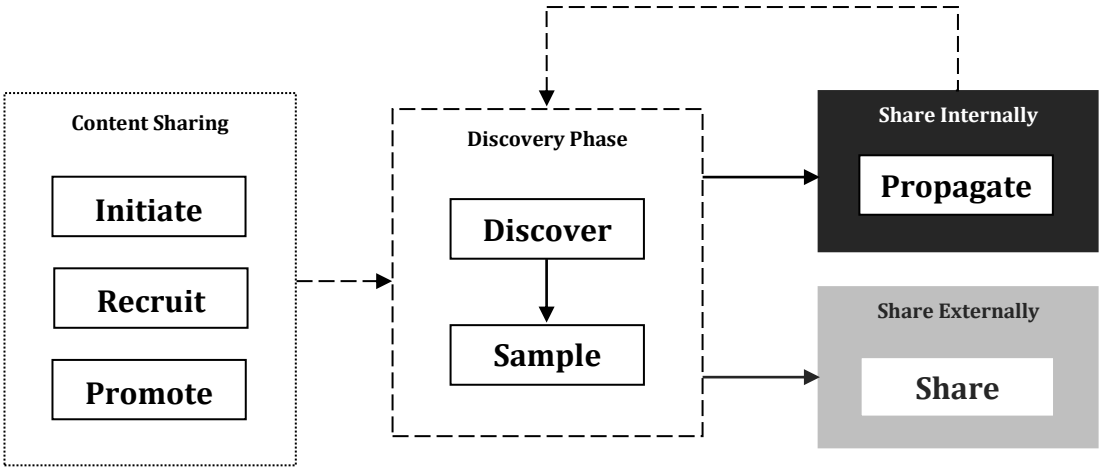


Figure 5-10: Content Sharing Process Model

Phase 1 – Initial Content Sharing: An individual shares content from external sources or as a propagating mechanism within the SNS based on content sharing intentions.

Phase 2 – Resultant Content Sharing: As a result of discoveries made within the network, an individual may share content on by either internally propagating or externally propagating content (external to the SNS).

5.4.2 Content Sharing Affordances (RQ3)

This section presents the evidence for sharing content based on the ability to connect and interact in a social network site. The reasons behind sharing are presented, as well as both the positive and negative connotations associated with sharing displaying possible constraints. Content sharing has been categorised into two affordances based on the findings:

Affordance F – Creating and sharing content

In this instance, users create and post content to their network. The source may include a variety of formats. In some cases, users post because of an ongoing experience or for reputational reasons, topics for discussion are posted or conversations are instigated. Other times users post about live gigs or events or share promotional material with their network.

Affordance G – Propagating internal content

In this case, users repost content to their network from a discovery within the social network site. These posts are open to the network or directed in some way. In line with sharing from external sources, the type of content may vary based on the post.

5.4.2.1 Content Sharing Positive and Negative Connotations

This section discusses the reasons behind content sharing activities. There exists a link between the act of sharing and the construction of an online identity. Users are aware of both the negative and positive connotations of content sharing and this affects the way in which people share and the type of content that is shared (see Appendix C-7 for the chains of evidence and Table 5-8 for counts based on mentions across case sites). Positive connotations are based on the concept of reciprocity and wide reach associated with SNS. Negative connotations are associated with repercussions on reputation and relevancy for audience.

MENTIONS OF CONTENT SHARING CONSTRAINTS					
Theme Description	**Twitter**		**Facebook**		**Total Mentions**
	AP	**GM**	**BK**	**PR**	
Positive connotations associated with sharing (reciprocity and wider reach)	3	-	3	-	6
Negative connotations associated with sharing (aware of audience and reputation)	1	4	3	2	10
Total Mentions	4	4	6	2	**16**

Table 5-8: Content Sharing Constraints Mention Counts

Content sharing is an important aspect of any social network site. It is necessary for users to share content in order for other uses to discover it and propagate it further within the network or to external mediums. Users share music for a variety of reasons and respondents mentioned the mutually beneficial relationship of sharing that is required for content to be accessed and disseminated. Twitter users in particular mentioned sharing reciprocity and the benefits of sharing in order to access content that may otherwise have been out of reach:

> ***AP1:*** *I love hearing the opinions of my friends and sharing mine too. By hearing others opinions I've actually broadened my musical horizons and listened to hundreds of songs I would not have normally listened to.*

Users also stated that it is important for people to share to make sure that the sharing activity continues. This affects how people choose which profiles to follow. Profiles with a lot of activity who add value to the network will be key influencers, generating content for others to share internally and garnering lots of connections.

> ***AP5:*** *I think share and share alike, if I don't share my interests then other people aren't going to share them with me and then the information sharing kind of stops.*

Sharing also helps to build an online identity for a user, and the content that is posted helps to shape a user's image based on their interests. Posting reputation plays an important role in how users decide who to follow or who not to follow. This is true for both Facebook and Twitter but is especially relevant for the formation of one-directional connections. Many of the Twitter connections are often based on unknown relationships and what a user posts will help others evaluate whether or not they should connect with a profile. This act of sharing will help a user assess shared tastes and the applicability of certain people's posts. This is extremely relevant in the context of music discovery as taste play such a large role in the consumption of cultural goods.

BK4: *Well you build up – it's a different identity you build up there, it's like your Internet personality and you can only really clarify what they are like through what they post so I suppose that's really important, then you think 'oh what I post is really important!' So you generally know, there are a few people that stand out on a day-to-day basis that you go 'oh they posted this!' you can tell – last time I clicked through to a link I really liked it.*

The posts will also influence whether a user will be interested in another user's updates or not and whether or not they should connect with a profile. What was interesting was that sentiments of posting reputation were often prefaced with a negative declaration associated with bad posting etiquette. These posts were deemed irrelevant or inconsequential in the network environment. Superfluous personal information was inappropriate to many of the users who wanted to access valuable interesting content in their activity feed and thus posted with these constraints in mind; and thus assessing content relevance for their followers before sharing it.

GM6: *Not as freely as some people. I have to be really…in terms of sharing other content I do have quite a high quality control threshold and do very much think about how relevant it is to my followers. I find nothing more irritating than following somebody that constantly retweets and shares anything that they see.*

It is emphasised that people follow profiles for specific reasons or to access content on specific topics. Therefore, certain types of sharing is expected and respected. Users build up a reputation around the type of content that they post. This initially influences the choice to follow that profile, but it also builds up expectations as to what type of content will be shared. Their posting habits are influenced based on the social and cultural influences within the environment.

GM5: *I wouldn't want to be polluting peoples timelines with rubbish, but I think most people, I think we are at the point that most people who are following me expect, they expect there is going to be a certain amount of music, there is going to be a certain amount of sport, if they don't like it they don't have to follow me you know.*

Likewise similar sentiments were shared by Facebook users:

BK5: *I suppose it's important as well that you don't post rubbish up all the time something that interests you because traffic is so vast you just want to create pockets of stuff of interests. So I mean on my personal Facebook I post up stuff that I*

am digging and obviously we post lists that Plugd are doing as well but I don't see the necessity of posting up my dinner details up on the internet.

With this in mind, the following sections present two content sharing affordances uncovered in the case sites.

5.4.2.2 Affordance F – Creating and Sharing Content

The following section applies the user labels to the discussion of "Affordance F", to clarify the evidence for the user labels in concert with the affordances. Four themes for this affordance emerged from the findings: (1) users share as a part of an experiential process while listening to music or having discovered music and wanting to pass on the experience, (2) other times users are inspired to share because they believe someone might like it and therefore share in a social context, (3) users also share upcoming gigs or events to recruit others, and (4) users share promotional material to promote music in the network.

AFFORDANCE F MENTIONS					
Theme Description	**Twitter**		**Facebook**		**Total Mentions**
	AP	**GM**	**BK**	**PR**	
Sharing External Content (Initiators)					
Experiential (while listening to music/discovering content)	2	13	4	9	28
Sharing links to music content often in a social context (someone might like this)	1	9	5	6	21
Total Mentions	**3**	**22**	**9**	**15**	**49**
Sharing Live Gigs and Events (Recruiters)					
Sharing upcoming gigs and events	1	4	2	3	10
Sharing Promotional Material (Promoters)					
Sharing promotional material (music content/live events/updates)	-	1	5	8	**14**
Total Mentions	**4**	**27**	**16**	**26**	**73**

Table 5-9: Affordance F Mention Counts

Sharing External Content (Initiators)

Sharing external content arose in the context of a variety of situations (see Appendix C-8 for the chains of evidence and Table 5-9 for counts based on mentions across case sites). In some cases, users were experiencing music in real time. While listening to music or reading about music *etc.* they decided to share it on with their

social connections. This was common across both Twitter and Facebook, and all of the case groups. Users link to video or audio music content like in the case below.

> ***AP1:*** *There are plenty of times I have tweeted when I'm listening to a specific song or have provided a link to some sort of awesome music video that I think my followers would like.*

Other times users are reading or learning about music content as opposed to listening to it. In one example, a respondent (PR4) was reading a blog post on an external site and decided to share it to either Facebook or Twitter. Another user mentions how easy it is to share music, using another platform called 'Spotify'. While listening to music on Spotify users can just share it directly from the platform to their follows. Facebook and Twitter, and other web-based systems, have created this ability to share and embed across different websites, making the process of sharing easy and effective for sharing music.

> ***GM5:*** *I do on a daily basis, Spotify is a very good way of just tweeting it, touch of a button, whatever song you are listening to… I just direct to whoever is following me, just post up on my timeline. Like, it is, like, its brilliantly quick, you are more inclined to do it, than not do it almost if you are enjoying it, enjoying an artist because it is so easy.*

Other users mentioned 'Shazam', a mobile application that recognises music and informs the user of the name of the artist and song. This is very useful when hearing music inadvertently, whether at a bar or during a TV advert, situations in which it is inherently difficult to access music information easily. These users hear a song they like, and shazam it, if the music is recognised by the application they are given the name of the track and they can then post it to their network. In the midst of a new discovery, users share their experience with their followers. This is a novel ability for users and is a result of a combination of technologies now available. This ability is combined with their existing process of music consumption. A person no longer needs to be in the presence of another person to listen to a song together and discuss it; it can be done remotely using distributed resources, at the touch of a button and with no prior knowledge of the music in question.

> ***PR5:*** *So a lot of the time it is tracks like that. Shazamming stuff and then I will post it up on Facebook then as well. I don't know why I put it up on Facebook, it's just,*

sometimes people like it you know, two or three people like it then hopefully they start listening to it and maybe it just kind of grows from there.

Many users mentioned the social aspect of sharing music, including the fun and enjoyment they get from sharing music tastes and recommendations and the personal experience it provides. Sharing music is bound up in identity and self-presentation. It also allows people with shared interests to share relevant music with each other. One user (BK1) reported that it was a way of interacting with different types of connections whether friends, music blogs, a shop, which allows you to ultimately sharing your tastes with others and also receive ideas for new music as a result of an interaction.

Sharing Live Gigs and Events (Recruiters)

In addition, many of the users mentioned using social media to recruit friends and family to live events. This was mentioned in both Twitter and Facebook. Users would create a post with information about an event and try to garner interest from their social network.

AP5: *I have used Twitter to talk about concert updates and find out who wanted to come to a concert with me.*

BK6: *I might start a conversation if I shared it with one person in particular. Say If I wanted to go to a gig and I got a YouTube link of the band that I was going to see and put them on someone's page and go 'Listen to them, they're class, we should go' kind of a thing.*

Other users mentioned 'checking-in' which alerts their followers that they are at a gig and allows them to add additional content like who the artists is and link to other content.

PR1: *If I'm going to gigs I like to say who I'm going to and also add a video of the band that I'm going to.*

This activity highlights a merging between offline and online interactions and how online recruiting is enabling users to organise offline events.

Sharing Promotional Material (Promoters)

Users also mentioned using the social network site to promote material. In some cases users were promoting themselves; sharing information and content about the work they are doing – like if they have a live gig coming up.

> ***GM6:*** *Aside from my own production in terms of writing and art which I do promote through Twitter and Tumblr and Pinterest depending on where it is relevant.*

One respondent mentioned that they have become more active on the social network since becoming a DJ. As the need for promotion became more essential, their use of social network sites increased – specifically for music – as a result.

> ***PR6:*** *I only started DJing out or playing out in pubs and bars and stuff last year so…my usage of it has definitely changed since then because I have to – I don't have to – but I use it more to promote myself. I'd post more music, post more mixes, post more gigs, gigs that I am going to go to or gigs that people should check out I kind of do that, I try and promote myself a bit more and try and promote these other gigs a bit more. I think I use it more for music now than I did a couple of years ago I suppose. I probably wouldn't have posted as much music a couple of years ago, I would have just used it for kind of staying in contact with friends.*

Another respondent (PR2) mentioned using both Facebook and Twitter to promote their blog; noting the differences between the two platforms. These social network sites can be automatically synced so that posts are automatically sent to each platform. But the user noted that there are nuances to both sites that require specific attention when posting their promotional material that requires specific formatting within each SNS that is necessary to be aware of. For example, Twitter only allows post with 140 characters, thus if automatically posting from a blog the heading might be cut short, hence it is important to tailor each post for each SNS. By understanding each social network site and how to use it, users make the most out of what each platform can do. Thus, the following affordance model is proposed based on the findings.

Affordance Model F:

The ability to share content (Content Sharing) in an SNS enables users to create and post content (Sharing Interactions) from a variety of sources, this enhances profile

building (Profile Building) and aggregates the content into an activity feed (Content Aggregation) which further enhances future discoveries and/or sampling activities.

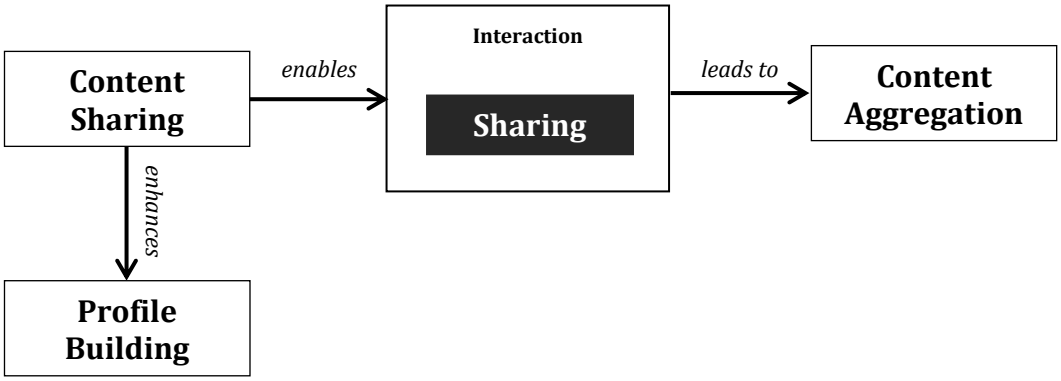


Figure 5-11: Affordance Model F – Creating and Sharing Content

The affordance model depicts the technical capability to share content with users which both enhances the profile of a user and additionally results in content aggregation for both the user and their connections. The ability to share content enables users to engage in information sharing behaviours. This is vital in a social network site setting, as the contributions of users are vital to the value of the network and is the basis for creating a profile. By sharing content a user is promoting both the content and themselves, as the content shared is assessed and consumed by others within the network which impacts on reputation and image. The following section outlines the affordance for propagating internal content from discoveries within the network as opposed to creating and sharing content from external sources.

5.4.2.3 Affordance G – Propagating Internal Content

Sharing internal content consists of users who have discovered content within the social network and share it on further propagating within the network (see 0 for the chains of evidence and Table 5-10 for counts based on mentions across case sites). This affordance consists or internal reposting once a discovery is made.

AFFORDANCE G MENTIONS					
Theme Description	**Twitter**		**Facebook**		**Total Mentions**
	AP	**GM**	**BK**	**PR**	
Propagating internal content (re-sharing post)	3	3	-	4	**10**

Table 5-10: Affordance G Mention Counts

Propagating Internal Content (Propagators)

Within Twitter 'retweeting' is the method that is used. Retweeting allows a user to propagate a tweet to their followers. One user (GM1) mentioned it is a great way of showing other people what content is available. In Facebook there is a 'share' button underneath posts. Users can share posts to their connection list like with Twitter.

> ***PR5:*** *I'd probably reshare not my friends more the bands or you know the blogs that I follow, I reshare their stuff but not really other people's post.*

This type of sharing was only mentioned ten times, in comparison with a much larger proportion of users that mentioned sharing external content (73 mentions). One of the reasons that one user retweets was to aggregate interesting content into his own timeline so as to bookmark it for himself, not as a mechanism to propagate content to his network:

> ***AP3:*** *By retweeting I also create a 'diary' for myself so I can go back and see what I've forgotten I was listening to.*

In this case, the user created an activity feed of interesting and relevant content for themselves and not for a specific group of people. Thus the following affordance model is proposed based on the findings.

Affordance Model G:

When content is aggregated in an activity feed (Content Aggregation), a user is given the capability to further propagate the content internally in the system (Content Sharing) which enables users to share content with their group of followers (Sharing Interaction) and additionally enhances their profile (Profile Building).

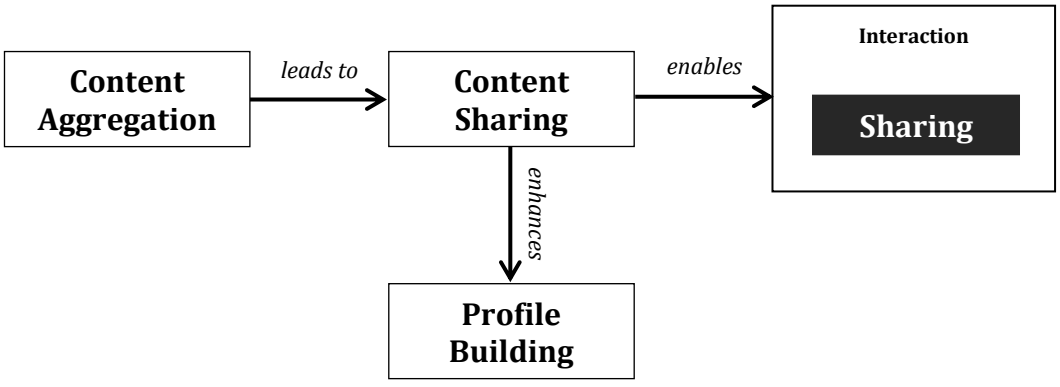


Figure 5-12: Affordance Model G – Propagating Internal Content

The affordance model depicts the interaction between the ability to discover content through content aggregation which enables further internal propagation. By propagating content internally a user is spreading the content from one group of connections to another, which widens its reach. In addition, users are engaging in profile building by sharing content which is inevitably linked to their own image and posting reputation. The following section combines the two content sharing affordance models into a single model representing the relationships between the affordances and the activities enabled.

5.4.3 Content Sharing Activity-Affordance Relationship Model

This section presents a cumulative content sharing model combining the affordance models for affordances F and G from previous sections. This model displays the relationships between the (1) affordance hierarchies and relationships and (2) their relationship with user activity; in this case content sharing tasks. It displays a more comprehensive examination of affordances and their interactions, highlighting the dependencies between the affordances and between the affordances and activities displayed in Figure 5-13.

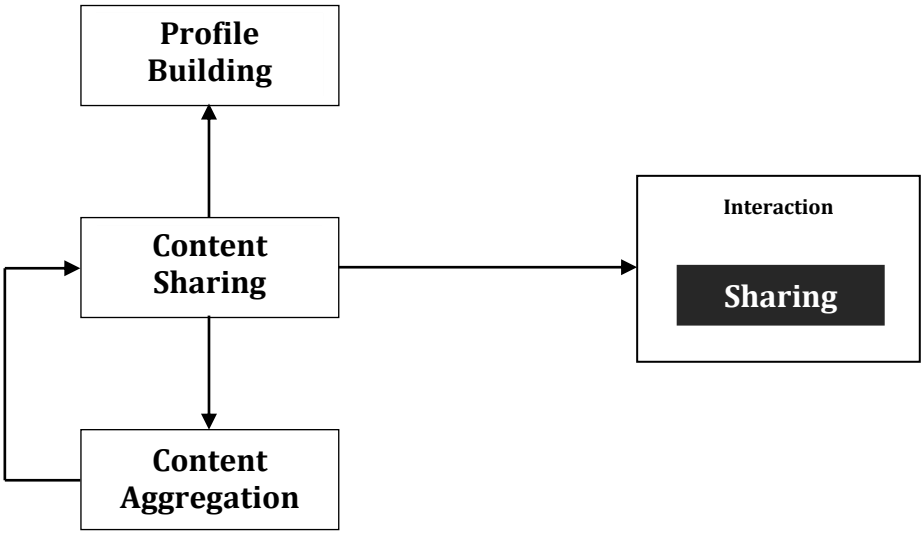


Figure 5-13. Content Sharing: Activity-Affordance Relationship Model

Content Sharing both leads to *Content Aggregation* and is enabled by *Content Aggregation*. By creating and sharing content users add value to the network and enable content to be propagated across the network. Users discover content through activity feeds and social interactions and can share this content within their own group of connections. These actions enhance profile building, as content that is shared by a user is presented as a part of their profile and is linked to their image and

self-presentation. An increase in the amount of content that is shared by a user will enhance their profile and reputation. This model presents one aspect of the actions afforded to individuals in social network sites based on the evidence for content sharing. The following section combines the three models for active seeking, passive encountering, and content sharing and present a comprehensive theoretical research model that depicts the consumption of cultural goods using SNS. The research model theorises the study findings and presents 14 propositions regarding the affordance and activity relationships and hierarchies.

5.5 Theoretical Research Model for the Consumption of Cultural Goods Using SNS

Building on (1) the analysis of the intended affordances (see Chapter 4) and (2) the analysis of the affordances in use (see Affordance Models A through G), this section presents a more formal theorisation of the consumption of cultural goods using social network sites. This theorisation identifies the hierarchies and dependencies between the SNS affordances, illustrating the steps users undertake when consuming cultural goods and the setting in which this is enabled by a social network site, based on features and functionalities and the affordances perceived by users. By undertaking this theorisation, a better understanding of the way users engage with SNS for consuming cultural goods is achieved, as well as an understanding of social networks in general, as important relationships are highlighted that lead to successful discovery exchange. For example, the social affordances are the foundation in which content affordances are facilitated. Likewise, in order for a user to access content in an SNS it is important to form social connections based on what a user wants to achieve and what content they want to access. In addition, it is important to continually build a profile for social presence and ultimately social influence, as building a reputation and audience through connections and interactions is an essential aspect of social network site use. This section begins with formal definitions of 11 constructs and a table with examples of their empirical indicators drawn from the study data (Section 5.5.1). This is followed by the theoretical research model which includes 14 propositions theorising the relationships between affordances and between affordances and activities. Next, the nested hierarchical relationship between the affordances and their dependencies is outlined in Section 5.5.2, by presenting the eight propositions related to the affordance relationships.

This section presents evidence of the proposed relationships and outlines the affordance hierarchies. Finally, this is followed by a summary of the activity-affordance relationships and the final six propositions (Section 5.5.3), which comprise the complete theorisation of the consumption of cultural goods using SNS.

5.5.1 Constructs and Measures

This section firstly presents a table listing eleven constructs, their definitions, and examples of their empirical indicators (see Table 5-11). These constructs relate to the theoretical research model following the table (see Figure 5-14). By formally defining the constructs this research substantiates the findings in Chapter 4 and provides empirical indicators for each construct. This expands the previous affordance and activity definitions and provides the basis for the theorisation of the consumption of cultural goods using SNS. The theoretical research model presents 14 propositions describing the relationships between affordances and between affordances and activities. The model displays the interplay between the social and content affordances and the affordances that are directly related to the activities undertaken by users. In the following sections both types of relationships are described. There are eight propositions related to the structure and hierarchy of the SNS affordances. These eight propositions describe the dependencies between each affordance highlighting the nested nature of content affordances within the social affordances, as well as the individual dependencies between each affordance. The final six propositions are related to the activities enabled by each affordance. These propositions describe the relationship between the technical artifact and the actions undertaken by its users for the consumption of cultural goods. By theorising these relationships the structure and nature of SNS for the consumption of cultural goods is presented. These hierarchies and dependencies are also applicable in other research contexts as the nature of SNS is dependent on the user and the user's motivation for using the system. For example, forming social connections is necessary in order to access aggregated content, in the context of consuming music it is therefore necessary to connect with users who will provide music content, whether friends with similar interests, band pages or other music-related profile pages. But this can be applied to other contexts also, like if a user wishes to access content specifically on news and current affairs, then following social connections that provide such information is crucial to achieve this.

Construct	Definition	Example Empirical Indicators of Model Constructs
Profile Building	*Profile Building* is the ability to create, manage, and update a profile page, includes personal information and user activity	▪ Users create a profile ▪ Users add profile information ▪ Users manage profile settings ▪ Users edit profile details
Social Connectivity	*Social Connectivity* is the ability to search and connect with people, pages, groups and networks	▪ Users form reciprocal connections ▪ Users form unidirectional connections ▪ Users search for connections ▪ Users are suggested connections
Social Interactivity	*Social Interactivity* is the ability to interact and communicate with a group of connections	▪ Users interact asynchronously with connections including: comments and posts ▪ User interact synchronously with connections including: instant messaging and video/voice calling ▪ Users rate interactions from connections
Content Discovery	*Content Discovery* is the ability to search or browse for specific content	▪ Users search for key terms/trends ▪ Users browse search results ▪ User filter search results
Content Sharing	*Content Sharing* is the ability to share content with a group of connections	▪ Users create and share content from external sources in a variety of formats ▪ Users share/propagate content from internal sources in a variety of formats
Content Aggregation	*Content Aggregation* is the ability to access or create aggregated forms of content	▪ Users access activity/content feeds ▪ Users filter activity/content feeds ▪ Users create specific activity/content feeds
Search	The *Search* construct involves goal-directed information seeking behaviours whereby users deliberately search for information and content	▪ Users search for specific content including: information, products, updates, companies, public figures, key terms, *etc.*
Explore	The *Explore* construct involves experiential information seeking behaviours whereby users explore or browse for information and content	▪ Users explore/browse for content in a directed manner ▪ Users explore/browse for content in an undirected manner
Discover	The *Discover* construct involves accessing new and unfamiliar information/content and updating beliefs through learning	▪ Users discover content specifically sought ▪ Users discover content because of receptive behaviours ▪ User discover content serendipitously
Sample	The *Sample* construct involves experiencing a direct source of information/content	▪ Users sample/experience content including: watching videos, listening to audio, viewing images, reading extracts, *etc.*
Share	The *Share* construct involves creating and publishing content through social interaction with others	▪ Users create and share content ▪ Users reshare/repost content ▪ Users share openly to the community ▪ Users share with a bounded group/individual

Table 5-11: Constructs and Empirical Indicators

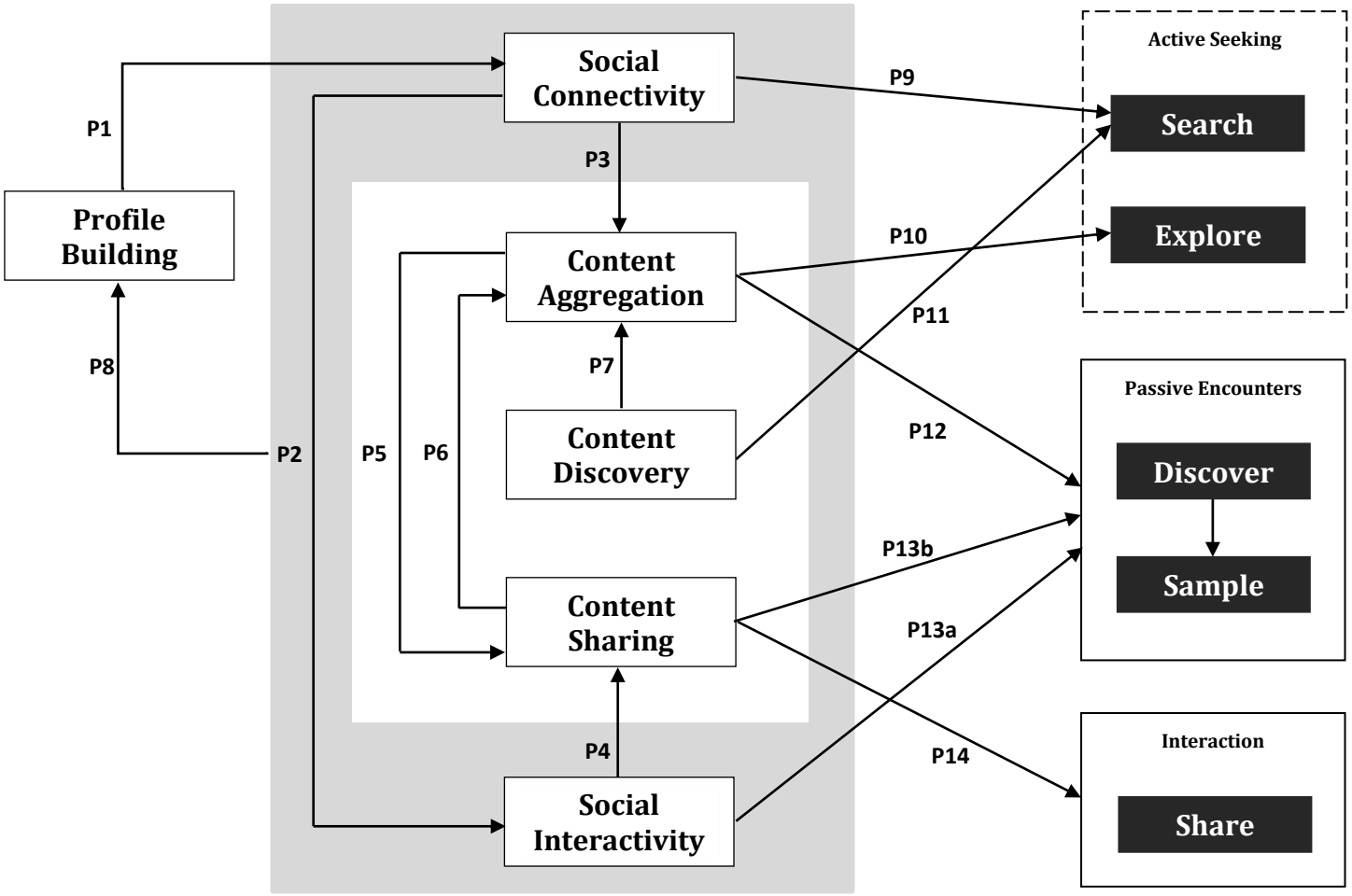


Figure 5-14: Theoretical Research Model for the Consumption of Cultural Goods Using SNS

5.5.2 Affordance Relationships

This section presents eight propositions describing the nested hierarchical dependencies between the affordances of social network sites. The social and content affordances are dependent on each other, whereby content affordances are nested within the social affordances, and the affordances are hierarchical in nature. To illustrate these relationships an Affordance Relationship Model is presented in Figure 5-15.

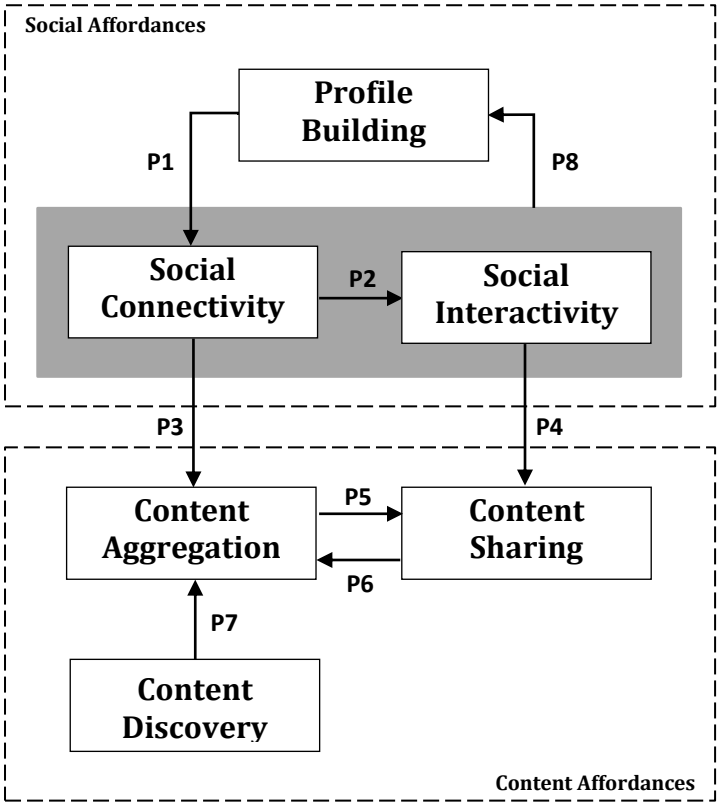


Figure 5-15: Affordance Relationship Model

Table 5-12 presents propositions one to eight with the relevant affordance model from which it was derived and examples of the proposed relationships drawn from the study data. Next, each proposition is described and the affordance hierarchies and relationships are outlined. These relationships illustrate the nested and hierarchical nature of the SNS affordances and demonstrate the process by which users build a profile and discover content over time through continuous interaction with the system. These relationships also highlight the importance of activity and engagement in building a profile and creating social presence and constructing an online identity.

Proposition		Relevant Affordance Model	Example Evidence of Proposed Relationships
P1	*Profile Building* is a prerequisite for *Social Connectivity*	– A: connection search and follow	▪ Users reported creating a profile to connect and interact with others ▪ Users linked identity and reputation management to the maintenance of their profile influenced by their network and the interactions that take place over time ▪ Users reported tailoring/filtering profiles to personalise activity feeds to access relevant and interesting content
P2	*Social Connectivity* is the basis for enabling *Social Interactivity*	– E: directed connection interactions	▪ Users reported connecting with pages to enable interaction ▪ By connecting with multiple pages users reported enabling more varied interactions ▪ Users reported a variety of motivations for enabling interactions depending on the relationship of the connection
P3	*Social Connectivity* results in *Content Aggregation*	– A: connection search and follow – B: connection search and explore – D: browsing activity feed and discovering content	▪ Users reported connecting with pages to add activity to their feed ▪ Users reported connecting with pages to access profile information/updates ▪ By adding/removing connections users reported expanding/constraining the feeds that they are subscribed to ▪ Users reported that by connecting with additional pages users are exposed to more varied/diverse/personalised content ▪ Users stated that by connecting with more pages users are exposed to new connection suggestions
P4	*Social Interactivity* is the basis for enabling *Content Sharing*	– E: directed connection interactions	▪ Users reported engaging in social interactions in order to share content and information with others ▪ Users stated that a variety of interactions occurred whether synchronous/asynchronous; direct/indirect; individuals/groups ▪ Users reported that content sharing occurred based on the type of connection relationships and based on the perceived relevance of the content
P5	*Content Aggregation* enhances *Content Sharing*	– G: propagating internal content	▪ Users reported that accessing content via the aggregated content in the activity/content feed encouraged users to further propagate the content in the network ▪ Users reported that internal propagation was useful for spreading a message amongst a network ▪ Users reported internal propagation was useful for saving content for personal use and future retrieval

			▪ Users reported re-sharing content from high profile pages as well as from friends and known connections
P6	*Content Sharing* is a prerequisite for *Content Aggregation*	– F: creating and sharing content	▪ Users reported that content sharing is an important mechanism for adding content and value to a network ▪ Users reported that a limited number of users actively shared content in their network ▪ Users reported sharing because content was interesting or was worth promoting ▪ Users reported sharing to start discussions and engage with others ▪ Users reported sharing based on events unfolding in real time
P7	*Content Discovery* results in *Content Aggregation*	– C: searching key terms	▪ Users reported searching for key terms which resulted in a list of returned search results ▪ Users reported exploring returned search results for to access relevant content and information ▪ Users reported the importance of relevant search terms when undertaking a search query ▪ Users reported the importance of tagging/adding key words in the creation of content for accessing relevant content in search queries ▪ Users reported the unsuitability of broad search terms in returning relevant search results
P8	*Social Connectivity* and *Social Interactivity* enhances *Profile Building*	– A: connection search and follow – F: creating and sharing content – G: propagating internal content	▪ Users reported that increased social connectivity added more content to a profile and increased access to more diverse sources of content ▪ Users reported that increased social interactivity and content sharing whereby users actively engaged and contributed to the network enhanced profile building and access to content ▪ Users shared content to build relationships and create closer more intimate connections ▪ Users reported sharing content to build reputation and disclose tastes ▪ Users reported that increased activity overall increased the value of the profile ▪ Users reported implicit cues about appropriate profile building and awareness of audience when engaging in profile building activities

Table 5-12: Affordance Relationship Propositions and Evidence

The analysis of Affordance Model A revealed that the *Social Connectivity* affordance is dependent on the *Profile Building* affordance. From this analysis proposition one is set forth:

Proposition 1: *Profile Building* is a prerequisite for *Social Connectivity*

A user's ability to build and manage a profile facilitates them to connect and interact with other users. By actively building a profile a user is both personalising an online space, by streamlining relevant and interesting content, and correspondingly is creating a representation of self by establishing an online persona that is presented to others through information disclosure. Building a profile is the first step in creating an online social network site presence. Building the profile enables a user to search and connect with other people. Profiles represent the individual and serve as a focal point for interaction. It is the foundation with which users connect and interact.

The analysis of Affordance Model E revealed that the *Social Interactivity* affordance is dependent on the *Social Connectivity* affordance. From this analysis proposition two is set forth:

Proposition 2: *Social Connectivity* is the basis for enabling *Social Interactivity*

A user's ability to search and connect with others users is the basis for enabling them to interact with each other using the system. Through the act of connecting the opportunity for social interactivity is enabled and thus increased social connectivity facilitates access to more varied interactions. Forming social connections in a social network site enables people to interact and communicate with each other. It is necessary for users to be able to find and connect with each other so that they can communicate using the system.

The analysis of Affordance Models A, B, and D revealed that the *Content Aggregation* affordance is dependent upon the *Social Connectivity* affordance. From this analysis proposition three is set forth:

Proposition 3: *Social Connectivity* results in *Content Aggregation*

A user's ability to search and connect with others users leads to the aggregation of a connection's activity into an activity/content feed. Through the act of connecting a user has access to others user's profile information and activity and thus increased

social connectivity facilitates access to more information and content and facilitates a user to personalise their network based on personal preferences. By forming connections with individuals or content in a network, the system aggregates content into a specific structure, either system-based (timeline, activity feed) or user-based (filtering, searching).

The analysis of Affordance Model E revealed that the *Content Sharing* affordance is dependent on the *Social Interactivity* affordance. From this analysis proposition four is set forth:

Proposition 4*:* *Social Interactivity* is the basis for enabling *Content Sharing*

A user's ability to interact with other users is the basis for enabling them to share content within the network. The ability to interact within the system supports different forms of interactions but more specifically enables users to share resources and user-generated content with a group of connections either synchronously or asynchronously. The ability to interact with connections in an SNS enables users to share various types of content with each other from either internal or external sources and a variety of formats are supported including: text, video, images, audio, and hyperlinks.

The analysis of affordance model G revealed that the *Content Aggregation* affordance promotes and enables the *Content Sharing* affordance. From this analysis proposition five is set forth:

Proposition 5: *Content Aggregation* enhances *Content Sharing*

A user's ability to access aggregated content via an activity/content feed facilitates further content sharing within the network. Through activity/content feeds users are presented with an organised structured mechanism for discovering content which affords further content propagation within the network. The ability to aggregate content that is shared by connections enables an individual to further propagate content in the network internally, this act pushes content far and wide between the various nodes in a network enhancing the spread of content deemed popular or interesting.

The analysis of Affordance Model F revealed that the *Content Aggregation* affordance is dependent on the *Content Sharing* affordance. From this analysis proposition six is set forth:

Proposition 6: *Content Sharing* is a prerequisite for *Content Aggregation*

A user's ability to share content to a group of connections in the network leads to the aggregation of content in the system for both a user and their connections via an activity/content feed. By actively sharing content a user both contributes to their network of connections and adds content to their profile and thus builds reputation and reinforces identity. By actively sharing content in a network a user is further promoting content within the network. Sharing content involves social interactivity and further enhances profile building aspects for a user by enabling self-presentation through self-disclosure, as well as adding content to the network.

The analysis of Affordance Model C revealed that the Content Discovery affordance leads to the *Content Aggregation* affordance. From this analysis proposition seven is set forth:

Proposition 7: *Content Discovery* results in *Content Aggregation*

A user's ability to search and filter content leads to the aggregation of content from the network in a predetermined format via an activity/content feed. By specifically seeking content a user has access to more diverse and varied content normally limited by their group of connections. By actively seeking content a user discovers new people and content outside of their personal network. The ability to search and filter content enables users to create user-based aggregation not solely based on the connections formed, but which includes content that has been shared across the entire network, opening up opportunities for discover new and diverse people and content.

The analysis of Affordance Models A, F, and G revealed *Social Connectivity* and *Content Sharing* (and thus *Social Interactivity*) enhances the *Profile Building* affordance. From this analysis proposition eight is set forth:

Proposition 8: *Social Connectivity* and *Social Interactivity* enhances *Profile Building*

A user's ability to connect, interact, discover, aggregate, and share content enables a user to further build their profile and create a representation of their identity within the network. Increased activity through the social and content affordances enhances profile building and further personalises and streamlines a user's access to relevant and interesting content as well as building reputation and social influence. Forming

social connections and interacting with connections continues to build a person's profile. The more active and engaged a person is the more profile building that takes place. Self-presentation and self-disclosure contribute to profile building; enhanced by social connectivity and social interactivity and the content affordances thus enabled. Having presented eight propositions theorising the relationship between the affordance of SNS, the following section presents the relationship between the affordances and the activities for consuming cultural goods, demonstrating which SNS affordance enables which consumption behaviour, completing the theorisation of the consumption of cultural goods using SNS.

5.5.3 Activity-Affordance Relationships

This section presents six propositions describing the relationship between the affordances and user activities. Each affordance enables a user to undertake a specific activity and associated task. To illustrate these relationships the following Activity Relationship Model is presented in Figure 5-16.

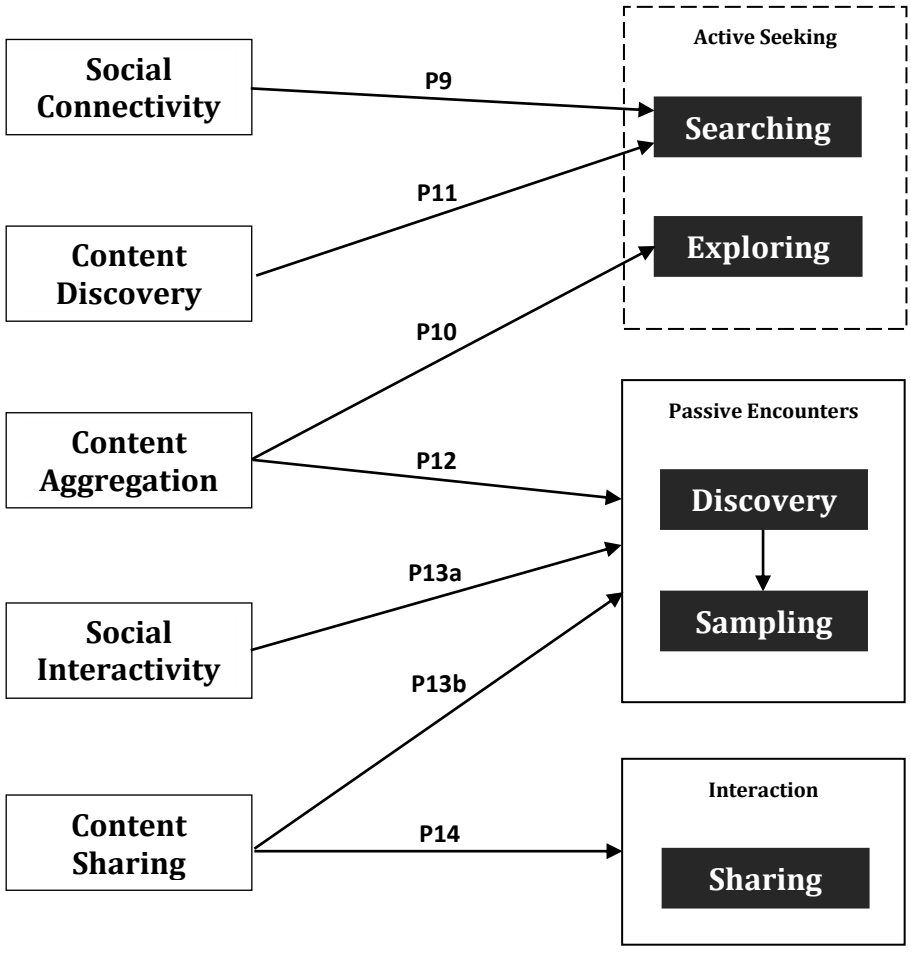


Figure 5-16: Activity-Affordance Relationship Model

Each proposition theorises the relationship between an SNS affordance and a consumption behaviour achieved by a user. Actively seeking content involves information search and exploratory behaviours. Searching tasks are achieved in an SNS through *Social Connectivity* and *Content Discovery* and the resulting *Content Aggregation* enables exploratory behaviours. Likewise *Content Aggregation*, *Social Interactivity*, and *Content Sharing* enables users to passively encounter content and thus discover and sample content using the SNS. This was a prominent activity in the evidence and provided users with a quick and easy way for encountering content through social connections. It is particularly useful for passive users who were more likely to use the system to discover content and less likely to contribute and share. Conversely, active and engaged users were more likely to share content with the network as well as engage in the other consumption behaviours. *Content Sharing* enables users to undertake these sharing behaviours, which is an important aspect for enabling discoveries and providing content in the system for others to search for.

This model presents an understanding of user behaviour and the affordances associated, but it also highlights the importance of an actively engaged user versus a passively receptive user, as both play a role in a social network system. The more active and engaged users reported more positively overall for the consumption of cultural goods using SNS. This was due to the value they received from actively contributing and interacting with the system – by both continuously building their profile and thus identity and reputation, and by forming more social and content connections. Passive users reported benefits for discovering content using SNS that they may not have sought out specifically and thus would not have accessed without the system. These users rely heavily on the contributions of their connections to encounter content and due to fewer connections and less activity reported less positivity overall than the active users.

To theorise these interactions Table 5-13 presents propositions six to fourteen and the related affordance model from which the proposition was derived. Following this table each proposition is summarised to provide a comprehensive view of the relationship between affordances and activities.

Proposition		Related Affordance Model
P9	*Social Connectivity* facilitates users to *Search* for connections	This relationship is demonstrated in Affordance Model A: connection search and follow
P10	*Content Aggregation* facilitates user to *Explore* for connection information and content	This relationship is demonstrated in Affordance Model B: connection search and explore
P11	*Content Discovery* facilitates users to *Search* for content	This relationship is demonstrated in Affordance Model C: searching key terms
P12	*Content Aggregation* facilitates users to *Discover* and *Sample* content	This relationship is demonstrated in Affordance Model D: browsing activity feed and discovering content
P13a	*Social Interactivity* facilitates users to *Discover* and *Sample* content	This relationship is demonstrated in Affordance Model E: directed connection interactions
P13b	*Content Sharing* facilitates users to *Discover* and *Sample* content	This relationship is demonstrated in Affordance Model E: directed connection interactions
P14	*Content Sharing* facilitates users to interact and *Share* content	This relationship is demonstrated in Affordance Model F: creating and sharing content and G: propagating internal content

Table 5-13 Activity-Affordance Relationship Propositions and Evidence

The analysis of Affordance Model A revealed that the *Social Connectivity* affordance facilitates users to *Search* for connections. From this analysis proposition nine is set forth:

> **Proposition 9:** *Social Connectivity* facilitates users to *Search* for connections

The ability to search and connect with other users facilitates users to actively search for people and pages within the system.

The analysis of Affordance Model B revealed that the *Content Aggregation* affordance facilitates users to *Explore* connection information and content. From this analysis proposition ten is set forth:

> **Proposition 10:** *Content Aggregation* facilitates users to *Explore* connection information and content

By aggregating content into a predetermined format via an activity/content feed users can actively explore content within the system based on the connections they have made.

The analysis of Affordance Model C revealed that the *Content Discovery* affordance facilitates users to *Search* for content. From this analysis proposition eleven is set forth:

Proposition 11: *Content Discovery* facilitates users to *Search* for content

The ability to search and filter content facilitates users to search for specific content within the system.

The analysis of Affordance Model D revealed that the *Content Aggregation* affordance facilitates users to *Discover* and *Sample* content. From this analysis proposition twelve is set forth:

Proposition 12: *Content Aggregation* facilitates users to *Discover* and *Sample* content

By aggregating content into a predetermined format via an activity/content feed users can passively encounter content within the system.

The analysis of Affordance Model E revealed that the *Social Interactivity* and *Content Sharing* affordances facilitate users to *Discover* and *Sample* content. From this analysis proposition thirteen is set forth:

Proposition 13a: *Social Interactivity* facilitates users to *Discover* and *Sample* content

Proposition 13b: *Content Sharing* facilitates users to *Discover* and *Sample* content

The ability to interact and share content directly with other users enables users to passively encounter content through social interactions.

The analysis of Affordance Models F and G revealed that the *Content Sharing* affordance facilitates users to interact and *Share* content. From this analysis proposition fourteen is set forth:

Proposition 14: *Content Sharing* facilitates users to interact and *Share* content

The ability to share content with a bounded group of connections enables user to share content within the system.

Having set forth six propositions regarding the activity-affordance relationships, this completes the theorisation of the consumption of cultural goods using SNS. A complex interactive understanding of this phenomenon is presented, which identifies the dependencies and intricacies of building a profile to discovering relevant and

interesting content. Users engage in a number of behaviours enabled by the system, but some behaviours are promoted over others (*e.g.* browsing the timeline) that are dependent on other actions (*e.g.* forming social connections). These relationships are useful in understanding how users interact with social network sites, and thus useful for understanding the design of these system and the creation of strategies for system use. Furthermore, it highlights behaviours conducive to promoting discovery exchange and extracting value, whether hedonic or utilitarian, from the use of SNS.

5.6 Chapter Conclusion

This chapter built on the intended affordances analysis from Chapter 4 from the system designer's perspective and analysed interview data with social network site users describing affordances 'in use'. Seven affordance models were presented describing the use of social network sites for the consumption of cultural goods, which embodied the interaction between the technical artifact and user activity. These models were structured according the three types of activities displayed by users: active seeking, passive encountering, and content sharing (for a comparison of activity prevalence across the case sites, case groups, and user types, see Appendix C-10). The models were abstracted to present a formal theory of affordance hierarchies and dependencies as well as the relationships between affordances and activities. A comprehensive theoretical research model, with constructs and empirical indicators was presented which included fourteen propositions describing the affordance and activity relationships. Firstly, eight propositions were presented theorising the relationship between the social and content affordances and six propositions theorising the relationship between the affordances and user activities.

This research contributes to the design of social media and social network site technologies by refining our understanding of what behaviours are afforded to cultural good consumers given a set of features. This in turn offers insight into the link between how users perceive social media (and what they can use it for) and why users adopt certain technologies in a given context; important for understanding the social media strategies developed by organisations and consumers alike – which hinges upon how user perceive the media. For example, although some users were aware of the 'lists' feature in Twitter and its use for creating indirect connections and categorising connections, not one user actually utilised this feature and therefore this behaviour was not afforded in this context. User's shared behaviours for the

consumption of cultural goods using SNS, but this research also highlighted the hierarchies and relationships between the social and content affordances for achieving discovery exchange. This is relevant in this context but also to the use of SNS in general. SNS support the construction of an identity online and users develop this identity in a number of ways – from connecting with other profiles, rating content, creating and sharing content, internally propagating content, and continuously updating profile information through self-disclosure. This construction is done based on the individual, and thus is applicable to other contexts outside of cultural good consumption. Given a user's intentions and beliefs about what they can achieve, ultimately influences the actual interactions that take place, this has repercussions for SNS design and for understanding the use of SNS in other contexts. It is also relevant for companies intending to use SNS to interact with consumers, as in a business context, image and reputation is an important function that SNS can provide through profile building. This research raises questions about how to choose connections and what types of content is chosen by the user to investigate further. Understanding these issues is relevant for designers and companies alike, as building an SNS that enables users to find and follow relevant connections is important, as is the ability to access content that invites a user to reshare and internally propagate content. Furthermore, a distinction between intrinsic (*i.e.* experiential browsing and exploring) and extrinsic (*i.e.* goal-directed search) consumption behaviours has been identified in the SNS context, with many extrinsic behaviours necessary for future intrinsic behaviours to occur, whereby active seeking and content sharing is a necessary component for passive encountering down the line as well as adding value to the network through activity and content. Further discussion regarding the contributions of the theoretical research model and associated affordance models follows in Chapter 6.

CHAPTER 6
DISCUSSION

6.1 Introduction

This research investigated the use of social network sites for the consumption of cultural goods. To achieve this objective, affordances were proposed as the theoretical lens in Chapter 2. The theory of affordances illustrates the relationship between a technical artifact and its users to achieve a goal. Applying the theory of affordances to extant literature a number of generic SNS affordances were derived and classified as social and content affordances. However, the affordances from the literature analysis did not ascribe entirely to the definition of affordances used in this research, which places the emphasis on the interaction between task, technology, and user characteristics for mediating affordance perceptions. Instead, the affordances derived from the literature in some cases denoted functionality or capabilities of a technology, and not the relational concepts of a user-artifact interaction; hence, the need to investigate further.

Moreover, the literature identified six music consumption tasks, divided into three user consumption activities: information seeking, information encountering, and information sharing, and provided an overview of general SNS users and music consumers. This was a necessary step in order to address all three elements important in the application of affordances to the research area and provide the required information in selecting an appropriate research strategy. From here, case study research with two phases of data collection was proposed in Chapter 3 to address the research questions (see Table 6-1). Chapter 4 detailed the findings from the system inventory (phase one of data collection) and Chapter 5 detailed the findings from the interviews (phase two of data collection). This chapter draws on these previous chapters to present and discuss the findings, along with the main contributions to research.

The chapter begins by presenting the study's research background (Section 6.2), before outlining the research objective and research questions (Section 6.2.1) and summarising the methods used to address each research question. In addition, the generic SNS affordances and music consumption tasks are described. Section 6.2.2 outlines the design of the study, highlighting each stage in the research process.

There are four stages, which reflect the process of applying the concept of affordances. At each stage a new level of specificity is applied to the three elements important in the study of affordances: technology, user, and task.

The next section presents and discusses the findings of the study for each research question (Section 6.3) along with the main contributions to research. This begins with the findings from the system inventory (Section 6.3.1) where three general SNS were analysed using the social and content affordances. The system inventory listed and categorised 18 technical features of SNS. These technical features along with their functionality and specific instantiations were analysed using the generic SNS affordances identified in the literature (*i.e.* the social and content affordances). The updated definitions of the content and social affordances are based on the system designers' intentions and the intended capabilities of the system; which inform the user about what a system can do. This resulted in an extensive catalogue of system features for general SNS categorised using the generic SNS affordances.

Section 6.3.2 presents an overview of the user classifications, user activities and the process of consuming music. Four types of users are classified based on active and passive characteristics in relation to music consumption and social network site use. These distinctions resulted from an analysis of interview respondent SNS usage intensity and music consumption intensity. Furthermore, three user activity process models for (1) active seeking and (2) passive encountering and (3) content sharing are presented and discussed. These models represent the steps that users undertake when consuming music using SNS, from the initiation of a task to the resulting outcome. Active seeking represents purposeful directed content seeking, passive encountering represents activities related to serendipitous discoveries, and content sharing relates to sharing activities from the perspective at the initiation of a sharing task and as a result of any discoveries made.

The findings from the final stage of the research process are discussed in Section 6.3.3, where seven affordances for the consumption of cultural goods using social network sites are described, along with representative affordance models. The affordances are grouped under the activities that they enable, whether active seeking, passive encountering, or content sharing. These affordances depict a rich view of the technical artifact and the tasks undertaken by the study's respondents, previously undefined in research. The studies research contributions are summarised in Section

6.4, before concluding the chapter with a discussion on the implications and limitations of the study (Section 6.5).

6.2 Research Background

This section outlines the research objective and the three research questions that address it. This is followed by a description of the generic SNS affordances and music consumption tasks that were used to guide the data collection and analysis. The design of the study concludes this section with a description of the four stages in the research process.

6.2.1 Research Objective

Given the prevalent use of SNS in the daily lives of individuals it became clear that these technologies were relevant to current practices of cultural good consumption (Russo and Peacock, 2009; Liu, 2007; Molteni and Ordanini, 2003). Systems designed specifically for the consumption of music, provide engaged and active music consumers a mechanism to seek and discover music based on their own needs and motivations. However, word-of-mouth is an integral aspect in the consumption of music and comprises serendipitous discovery mechanisms from sources trusted by music consumers (Livingstone, 2008; Singh *et al.*, 2006; Throsby, 2003). Social network sites, with a wide variety of uses – not specifically designed for music consumption – provide users with the ability to engage in electronic word-of-mouth activities with the possibility for mass information propagation (Naaman *et al.*, 2010; Huberman *et al.*, 2009; Java *et al.*, 2007; Acquisti and Gross, 2006; Marlow *et al.*, 2006). There is a gap in our knowledge of how people use social network sites and social media technologies in general for this new form of music consumption. These sites have complimented, and in some cases replaced, communication practices between people (Pierce, 2009; Zhao, 2006; Kavanaugh *et al.*, 2005; Nie and Erbring, 2002; Kraut *et al.*, 1999). They have also enabled large groups of people to communicate in a number of ways online, whether one-to-one or one-to-many, enhancing the spread of information and content (Kietzmann *et al.*, 2011; boyd and Ellison, 2007; Marlow *et al.*, 2006).

Affordances were proposed in the study of this phenomenon as it encourages researchers to take into account not just a set of technical features but the interaction between these features and a specific user group (Markus and Silver, 2008;

Torenvliet, 2003; Norman, 2002; Gaver, 1991). Based on a user's intentions and their prior experience, a system affords a variety of capabilities. It was important therefore to study the technical artifact in the context of a specific group of music consumers and the activities that they undertook to achieve their goals. Hence, the objective of this study was to:

> *theorise the relationship between the consumption of cultural goods and user activity on social network sites through the lens of affordances.*

To address this objective, the following research questions were formulated (see Table 6-1). The methods and outcomes to address these questions are summarised in the table.

	RESEARCH QUESTIONS	METHOD	OUTCOME
1	*What are the technical features of SNS?*	**Phase 1:** System Inventory	– System inventory of 18 technical features aligned with the generic SNS affordances
2	*What activities do users undertake when consuming cultural goods in SNS?*	**Phase 2:** Interviews	– Four active/passive user types – Three user activity process models
3	*What are the affordances of SNS for the consumption of cultural goods?*		– Seven affordances for the consumption of cultural goods using SNS – Theoretical research model with 14 propositions of affordance and activity relationships and dependencies

Table 6-1: Research Questions and Study Outcomes

The following sections present each stage of the research process in the application of affordances, taking into account each method employed for data collection. Data collection and analysis was informed by the literature analysis, which classified six generic SNS affordances and six music consumption tasks. These generic SNS affordances were grouped into social affordances and content affordances. The social affordances consist of: profile building, social connectivity, and social interactivity. Social affordances relate to the social behaviours enabled by the systems. Furthermore, social affordances focus on the user and the building of connections and identity. The content affordances include: content discovery, content sharing, and content aggregation. Content affordances are enabled by the social affordances but specifically relate to the access and distribution of content and information within the system.

The six generic consumption tasks defined in the literature were: search, explore, discover, sample, interact, and share. These generic tasks were categorised into three types of user activities: information seeking (search and explore), information encountering (discover and sample), and information sharing (interact and share). Information seeking accounts for tasks related to initial consumption actions taken by a consumer when searching or exploring music content. Information encountering is the discovery phase, where a user has accessed content and experiences and samples it. Finally, information sharing involves the propagation of content to other people enhancing the spread of information and content.

6.2.2 Study Design

The case study design consisted of two phases of data collection. The first phase was a system inventory of three general SNS and the second consisted of 24 interviews with a specific set of SNS users and music consumers from two SNS. These methods enabled the researcher to add value at each stage of the research process as displayed in Table 6-2. The early stages varied in the specificity of technology, user, and task. By adding specificity at each stage, the ability to investigate and analyse affordances for a particular research context was better facilitated.

RESEARCH PROCESS					
Stage	**Source**	**Degree of Specificity**			**Outcome**
		Tech	**User**	**Task**	
1	**Literature Review** --Chapter 2--	**Low**	**Low**	**Low**	– Six generic SNS affordances – Six music consumption tasks
2	**System Inventory** **--**Chapter 4--	**High**	**Low**	**Low**	– 18 technical SNS features, functionalities & instantiations
3	**Interviews** --Chapter 5--	**Low**	**High**	**High**	– Four classifications of users – Three activity process models
4	**Interviews** --Chapter 5--	**High**	**High**	**High**	– Seven SNS affordances for the consumption of music

Table 6-2: Stages of the Research Process

A low level of specificity in the table signifies a generic technology, user, or task. In contrast, a high level of specificity signifies an identified technology, user, or task. For example, in stage three, the interviews involved a specific set of users (*i.e.* music consumers and SNS users) who engaged in a particular set of tasks (*i.e.* music

consumption tasks). However, no specific technology was applied in the examination of user activity and the resulting activity process models.

Each stage added a new layer of understanding. Stage one represented the literature review and resulting in six generic SNS affordances. Whereas, the richest insight was gained from stage four, with all three elements examined to the highest degree of specificity; this stage resulted in the affordances of SNS for the consumption of music. The following sections detail the findings for stages two, three, and four of the research process, and the findings are discussed in relation to extant research (from stage one), before presenting the research contributions.

6.3 Summary and Discussion of Research Findings

This section answers the three research questions set forth in the study. Within each section a brief description is given of the stage of the research process in which it occurred, followed by a summary of the research findings for that question and a discussion of the findings in relation to extant literature. Each section concludes by describing the research contributions.

6.3.1 Research Question One: *what are the technical features of SNS?*

This section outlines the findings for the second stage of the research process. This stage involved phase one of data collection, the system inventory, which addressed research question one: *what are the technical features of SNS?* The system inventory detailed the technology, identifying the technical features of SNS using the lens of the generic SNS affordances (from stage one). Three specific social network sites were investigated: Facebook, Twitter, and YouTube. No specific user or task was specified at this stage, thus these are categorised as 'low' in Table 6-3.

RESEARCH PROCESS STAGE TWO				
Stage	**Source**	**Tech.**	**User**	**Task**
2	**System Inventory** --Chapter 4--	**High**	**Low**	**Low**
		Facebook, Twitter, & YouTube	Generic SNS Users	Generic SNS Use

Table 6-3: Stage Two of the Research Process

6.3.1.1 Summary of Research Question One Findings

The system inventory resulted in a detailed view of the technical features of general social network sites. Table 4-10 displays this categorisation, with 18 technical features, a description of their functionality, and the corresponding instantiations. In the analysis of the findings, the social and content affordances were aligned with the technical features. For the profile building affordance, five types of technical features were identified: (1) manage/edit a profile, (2) profile updates, (3) location tagging, (4) external profile management, and (5) mobile application. These features enable users to manage and organise their personal profile pages. Three types of technical features were derived for the social connectivity affordance: (1) connecting, (2) connection search/suggestions, and (3) connection lists/groups. These features enable users to find and connect with other users, pages, groups, *etc.* and control the relationships between the connections. For the social interactivity affordance, four types of technical features were identified: (1) asynchronous communication, (2) synchronous communication, (3) rating/liking, and (4) external interactions. By forming connections in social network sites users are enabled to interact. This interaction creates further ties and connections between individuals in a network. For the content discovery affordance, two types of technical features were identified[7]: (1) content search and (2) external access to content. Users can search for content and information using the social network and access content from external applications or websites. Two types of technical features were derived for the content sharing affordance: (1) interactions/community content and (2) externally shared content. Content sharing enables users to share content and information amongst their connections and to external sources. Two types of technical features were assigned to the content aggregation affordance: (1) aggregated content/activity feeds and (2) external aggregation of content. By connecting and searching in a social network, users are enabled to syndicate and aggregate content into a content/activity feed. The following sections discuss these findings and present the research contributions.

[7] The definition for the content discovery affordance has been amended based on phase two of data collection. Originally it was defined as the ability to discover content in a social network system. But during the process of analysis (for phase two) it became clear that because the definition encompassed content aggregation and social interactivity, it was unnecessary as a construct itself but required a more bounded definition. The new definition for content discovery is the ability to search or browse for specific content/pages within the environment. As a result, only two technical features are assigned to the content discovery affordance and hence the discrepancy from Chapter 4.

Affordance	Technical Feature	Functionality	Instantiation
Profile Building	Manage/Edit Profile	Ability to manage/edit the profile information and content, and design	Profile information, tagging, liking, multimedia content, display, uploading content
	Profile Updates	Ability to receive updates about profile activity	Email notifications
	Location Tagging	Ability to display location of posts/content/person	Geotagging, places
	External Profile Management	Ability to manage profile information from an external source or link accounts for automated updates	External applications
	Mobile Application	Ability to access the site and perform functions from a mobile application	Mobile applications
Social Connectivity	Connecting	Ability to connect to a person or page	Follow, add friend, subscribe, join/like pages
	Connection Search/ Suggestions	Ability to search for a connection or view connection suggestions	Connection search, suggestions/recommendations
	Connection Lists/Groups	Ability to connect to a group or network or to assemble a group	Make lists, join networks/groups
Social Interactivity	Asynchronous Communication	Ability to interact and communicate directly to an individual or open to a community asynchronously	Post, comment, message, tweet, retweet, like, tag, places, events
	Synchronous Communication	Ability to interact in real time to an individual or a group	Chat, video calling
	Rating/Liking	Ability to rate communications or content	Like, dislike, favorite
	External Interactions	Ability to interact with a community using an external technology or source	Autoshare, embed, share, link, applications
Content Discovery	Content Search	Ability to search or browse for specific content/pages	Search, browse
	External Access to Content	Ability to access social network content from an external source	Links, applications
Content Sharing	Interactions/Network Content	Ability to share content/information in a number of ways	Posts (all forms), direct messages, lists
	Externally Shared Content	Ability to share from/to an external source to/from the social network	Links, autoshare, widgets, social plugins
Content Aggregation	Aggregated Content/ Activity Feeds	Ability to access and/or create aggregated forms of content for the management of large amounts of information	Timelines (all forms), content feed, newsfeed, wall, trends, recommendations, topics
	External Aggregation of Content	Ability to access and/or create aggregated forms of content external to the social network	Links, autoshare, widgets, social plugins

Table 6-4: General SNS System Inventory

6.3.1.2 Discussion of Research Question One Findings

What is evident from the findings is that all three SNS share similar affordances for use in different contexts. The systems seem to be evolving to replicate the features provided by other social networks, whilst supporting diverse use intentions. YouTube is principally a video sharing site, but it also enables most of the features provided by the other SNS. Similarly, Twitter is a micro-blogging tool that has been enhanced through the connections of people and content, and the ability to drill-down into the content and extract relevant information from a vast amount of data. The creation of semantic data through tagging enables people to share and retrieve large amounts of content daily. This emergent use of Twitter has enabled it to be a richer media for finding relevant information and user personalisation. Furthermore, Facebook has underlying differences to the other two SNS. It is primarily used for creating links with known connections, but Facebook has additional ways to add semantic data to content, creating further ties between individual nodes in a network. An example of this includes the ability to "like" pages or to tag other users in posts.

All three SNS display similar affordances provided by varying instantiations of features and differing intended purposes. The two generic sets of SNS affordances (social and content) are relevant to the study of SNS by enabling research to view SNS services through their social affordances and the affordances to manage, share and find content. The findings suggest that there is a relationship between the social and content affordances; in particular, the capability to find and connect to other people is important to the success of social network systems and is the foundation of the other SNS affordances: social interactivity, content discovery, content sharing, and content aggregation. Content aggregation is also a crucial feature for discovering and sharing content within a network, and additionally content sharing is facilitated by the social interactivity affordance.

Thus, in relation to the affordances literature the findings confirm the existence of sequential and nested affordances (*cf.* Gaver, 1991) – affordances that are grouped in space and indicate further affordances. Designers create affordances in a hierarchy that may not map onto system functions but lead to more affordances (*cf.* McGrenere and Ho, 2000), also known as core and tangential (*i.e.* secondary) affordances (*cf.* Lee, 2010). In both social and content affordances there are hierarchies. These

hierarchies consist of core affordances that lead to the optional use of other secondary affordances. For example, the aggregation of content into an activity feed is a core affordance of content aggregation, and a secondary affordance is the ability to post a reply on content displayed in the activity feed (social interactivity); hence one capability may lead to another.

SNS are communication mediums that enable users to connect and interact, thus it is appropriate to compare the findings for the generic SNS affordances with past studies of traditional communication mediums, such as telephone, video-conferencing, two-way chat, email, and letter. Eight types of affordances were described for traditional communication mediums, (Clark and Brennan, 1991; Olson and Olson, 2000; Lee, 2010):

(1) co-presence (same physical environment)
(2) visibility (visible to each other)
(3) audibility (speech)
(4) contemporality (message received immediately)
(5) simultaneity (both speakers can send and receive)
(6) sequentiality (turns cannot get out of sequence)
(7) reviewability (able to review other's messages)
(8) revisability (can revise messages before they are sent)

The three social network sites differ to traditional media, where concepts such as: (1) co-presence, (2) visibility, and (3) audibility are represented differently in the online space of SNS. Social presence is evident in SNS through visibility of user actions and profile information, it is a mechanism to show people are available and willing to connect and engage. In the case sites, it is not automatically visible if a user is signed in and available for communication (except with Facebook chat – if enabled). Users are afforded visibility by undertaking interaction activities or sharing content with the network. This content is time stamped and gives other users an idea of when a user is present and active on the platform. Videos and video messaging are also employed, adding audibility to certain mediums. All three sites support video formats but do not automatically denote co-presence and visibility. It is assumed that content shared will be visible to the network and that there is a shared digital environment in which to undertake interactions, but not necessarily co-presence in the traditional sense. (4) Contemporality is addressed in SNS through the use of

activity feeds, with the constant updating of posts and comments to a timeline. However the messages may not be received immediately. Features that have a high contemporality include instant messaging tools and any video messages using VoIP. In SNS (5) simultaneity and (6) sequentiality are evident; users can post and receive messages, and it is automatic that sequentiality exists in this online format; especially evident in the posting mechanisms and the use of the chronological activity feed. Finally, (7) reviewability and (8) revisability can be aligned with rating and the ability to comment on a post. While in the online space all original content can be revised prior to posting. However, these affordances are not as important for SNS, as SNS differ greatly to traditional communication mediums and organise user interactions in a very different way. These differences are presented below, where the features for each generic SNS affordance is discussed and an updated understanding of the social and content affordances and their relation to each other is outlined.

Profile Building Features Discussion

The profile building affordance provides users with the capability to present themselves to the network in a manner of their choosing – through the disclosure of personal information and tailoring of an online persona (*cf.* Kietzmann *et al.*, 2011; Ong *et al.*, 2011; Kaplan and Haenlein, 2010; boyd and Ellison, 2007; Hsu and Lin, 2008; Acquisti and Gross, 2006). The system inventory confirmed this finding with features enabling users to manage their profile information, content, and design. Additionally, the system inventory confirmed that the profile building affordance also facilitates users to link their profiles to other websites external to the social network. In this way they have a shared profile for multiple platforms. This extends the research on the creation of 'identity strategies' whereby people present parts of their identity to different audiences (*cf.* Kietzmann *et al.*, 2011; Lamb and Davidson, 2002). Instead of presenting a part of their identity, just one online persona is created for use across a number of platforms, which can then be compartmentalised based on further actions in the network. Furthermore, the findings present a more detailed view of the role of profile building across the three case sites. For instance, Twitter and YouTube have a simpler, more basic profile, which is not the focal point of the SNS. While, in contrast, Facebook uses the profile as a central point for the user and most actions are recorded to the profile, providing the user with constant profile

building. Additionally, Twitter and YouTube place less emphasis on the profile information and promote content sharing as a mechanism for profile building. The profile in Twitter and YouTube acts as a user description/summary, but ultimately the sites place more value in the continuous contributions that add content and information to the network. However, in keeping with previous research, all three SNS have a profile and share functionalities that enable users to manage their identity and promote themselves online.

Social Connectivity Features Discussion

Social connectivity enables users to search for and connect with other users in the network (*cf.* boyd and Ellison, 2007; Ellison *et al.*, 2007; Acquisti and Gross, 2006; Marlow *et al.*, 2006). The system inventory findings validate the ability to connect with both f-networks (close friends and family) and v-networks (remote contacts) (*cf.* Beugelsdijk and Smulders, 2003), as well as connecting based on shared interests (*cf.* Java *et al.*, 2007; Marlow *et al.*, 2006). The instantiations of these connections include adding connections, joining groups, liking pages *etc*. The findings also validate the ability to connect based on two-way reciprocal connections and one-way following connections (*cf.* Kietzmann *et al.*, 2011; Naaman *et al.*, 2010; boyd and Ellison, 2007; Marlow *et al.*, 2006). However, not every type of connection relationship is facilitated or equally emphasised, and differs across the platforms. Facebook and YouTube enable both forms of connection relationships: reciprocal and one-directional. However, one is emphasised over the other in each site. Facebook promotes reciprocal friend connections as its primary form of social connectivity and YouTube promotes subscribing to channels as its primary form of social connectivity. However, 'liking' pages is also important in Facebook and enables users to link to their interests and follow public pages as well as friends. Twitter enables one-way 'following' with the capability of being followed back, adding reciprocity – though not a necessity of the following mechanism. In Twitter and YouTube the user may be known or unknown, but it is often the content and what a user shares where the value lies and how connections are formed. Thus, social connectivity in YouTube and Twitter is largely content-focused and social connectivity in Facebook is socially-focused. This finding illustrates the importance of the social connections and the way in which people are facilitated to connect, and the resulting impact on the structure of the network.

Social Interactivity Features Discussion

The literature stated that social interactivity is directly related to social connectivity by allowing users to communicate with a bounded group of connections (*cf.* Rybski *et al.*, 2009), but furthermore, can also be distinct from connectivity, as in the case of Twitter, by enabling users to access interactions that are not a part of their direct network (*cf.* Naaman *et al.*, 2010; Huberman *et al.*, 2009; Marlow *et al.*, 2006). The findings highlight that all three SNS enable users to create a conversation and interact with each other based on content and connection status. However, the primary forms of interaction in Facebook and Twitter consists of asynchronous communication via posting and commenting mechanisms. Additionally, Facebook requires some form of connection with private profile pages, unlike the default open Twitter and YouTube pages. YouTube, in contrast to the others, is primarily video-based with the capability to comment on these videos. Rating is an aspect of all three SNS, whereby users like or favourite posts made by other users. In Twitter this action additionally aggregates posts into a timeline for future retrieval, along with indicating positive recognition of a post. Hence, this feature has been associated with the content aggregation affordance and was not categorised as content discovery in the literature review. However, it is also a form of social interactivity by providing positive feedback to users about their interactions and providing judgment mechanisms for others to help assess content quality and impact. The findings illustrate that the mechanisms provided to users to communicate do impact on the way in which interaction occurs. Facebook and Twitter promote interactions between users with a high visibility of social presence, in contrast YouTube does not facilitate such clear directed interactions as its primary mechanism and thus may not be perceived by users, constraining instead of affording behaviour.

Content Discovery Features Discussion

Content discovery, or the ability to search or browse for specific content/pages, differs across the three case sites. The literature stated that SNS enabled users to search for specific content or browse posted or recommended content (*cf.* Cha *et al.*, 2007; Mislove *et al.*, 2006). However, search capabilities varied in Facebook, Twitter, and YouTube. Facebook was the most limited in its search capability, in comparison with Twitter and YouTube. Facebook allows users to search for people and pages but not to search for specific content. In contrast, searching within Twitter

and YouTube is primarily content search, with the added ability to filter search results to find social connections. This is a big difference in capability, which enhances the content-focus of Twitter and YouTube and the social connection-focus of Facebook, by limiting what a Facebook user can access. Tagging in Twitter is an important mechanism for retrieving and grouping relevant content which confirms previous research (*cf.* Golder and Huberman, 2006; Marlow *et al.*, 2006). Hashtags are often used to structure conversations around specific topics which can be aggregated together when searched for. Facebook, like Twitter enables tagging, but tags 'people' to a post, as opposed to organising topics – Twitter also shares this form of tagging with what is known as 'mentions'. YouTube does not tag posts in this way but adds metadata to a video to make it easier to retrieve through search. Thus, Facebook and Twitter support social tagging, whereas YouTube primarily uses tags to increase accessibility in search queries. As a result, search in Facebook may be constrained by its technical capabilities, while the affordances of search in Twitter and YouTube may be more apparent.

Content Sharing Features Discussion

Content sharing is enabled through the features associated with social interactivity. Users share internal and external sources of content in the network (*cf.* Cheng *et al.*, 2014). Information can be shared across many of the nodes in the network depending on the connections (Kaplan and Haenlein, 2010; Cha *et al.*, 2009; Hendler and Golbeck, 2008; boyd and Ellison, 2007) and various formats are supported, whether text-based, videos, images, links (internal and external), connections, and locations *etc.* (*cf.* Kumar, 2009; Java *et al.*, 2007). However, depending on the platforms capabilities and structure, certain formats may not be supported. For example, users can only posts links in the comment sections in YouTube – image or audio cannot be viewed or accessed. In contrast, Twitter and Facebook enable the embedding of external links into a post (images, videos, *etc.*) which can be viewed within the platform. During analysis Twitter did not have this capability, but have since added it. YouTube does however enable users to embed YouTube videos into other websites or social media sites. In this way, Twitter and Facebook can embed a YouTube video into a post, but not the other way around. As a result YouTube can be viewed more as a source of content and Twitter and Facebook as the content distributors. Another difference is the ability to internally share or reshare content

(*cf.* Cheng *et al.*, 2014). Twitter and Facebook both have mechanisms that enable a user to reshare/retweet a post to further propagate content to their group of connections. While, YouTube relies on likes and recommendations to promote content in a network and does not have a reshare mechanism in the same way as the others (*i.e.* propagation to internal network connections).

Content Aggregation Features Discussion

The main form of content aggregation in the three case sites is the activity feed. These feeds can be user built, customised for a particular topic, or are provided by the system functionality (*cf.* Naaman *et al.,* 2010; Burke *et al.,* 2009). All three case sites enable users to form connections and thus aggregate the posts shared by connections into an activity feed for the user in accordance with the literature (*cf.* Naaman *et al.,* 2010). In Facebook it is called a newsfeed and Twitter a timeline. YouTube differs slightly and provides a few different options, but the equivalent in YouTube is the 'My Subscriptions' activity feed. Activity feeds are also system-generated based on trends, browsing history, and personalisation (*cf.* Adomavicius and Tuzhilin, 2005; Nasraoui, 2005; Eirinaki and Vazirgiannis, 2003; Perkowitz and Etzioni, 2000). As described in extant literature, these feed are based on recommendations and not based directly on the connections formed (though it may be related). Each site had different algorithms based on a number of factors. Twitter has 'Trends', Facebook 'Top Stories', and YouTube had a variety including 'Suggested Videos' and 'Trending Terms'. This form of aggregation is dependent on the design of the system. However, what is evident is that user actions influence content and content presentation. Content aggregation and the way in which content is presented to the user is a very important mechanism in SNS. This aggregation is dependent upon the purpose of the site and the design of the system and may afford different methods for accessing content.

To sum up, the three case sites shared similar features for the support of different intentions. From the findings it is clear that social affordances are a precursor to the content affordances. It is necessary to firstly build a profile and form social connections, in order to then interact, share, discover, and aggregate content. Subsequently, it is necessary to interact, share, discover, and aggregate content in order to build your profile and extend your social connections. Hence, the next section addresses these relationships.

6.3.1.3 Contribution of Research Question One Findings

The system inventory findings extend our understanding of social network sites by contributing empirical findings of 18 technical features, a description of their functionality, and specific instantiations within social network sites. Extant literature provided a broad understanding of SNS functionality but a comprehensive list of features and their affordances did not exist. This study extends this understanding by discussing both unique and shared features of three SNS case sites, while categorising them under the six generic SNS affordances identified in literature. We are now better equipped to understand user actions and the structure and design of SNS systems. The relationships of these affordances provide a deeper understanding of the hierarchies of SNS functionality and the way in which people are encouraged to interact with them. As a result, the findings have highlighted that even though each system is designed to support diverse use intentions and prescriptive use objectives, the three systems share similar features and functionalities – which may or may not be perceived in the same way by users.

6.3.2 Research Question Two: *what activities do users undertake when consuming cultural goods in SNS?*

Stage three of the research process examined the activities of a specific group of users distinct from the interactions with the technology (see Table 6-5). Hence, the specificity of user and task is high and the technology is low. This stage addressed research question two: what activities do users undertake when consuming cultural goods in SNS? Data was collected as a part of phase two of the research methodology. Phase two consisted of 24 interviews with SNS users and music consumers. The outcome of this stage was an extensive overview of users and activities.

RESEARCH PROCESS STAGE THREE				
Stage	**Source**	**Tech.**	**User**	**Task**
3	**Interviews** --Chapter 5--	**Low**	**High**	**High**
		Generic SNS Technologies	SNS Users and Music Consumers	Music Consumption Activities

Table 6-5: Stage Three of the Research Process

6.3.2.1 Summary of Research Question Two Findings

User classifications were created based on music consumption intensity and SNS usage intensity. Following are the four classifications of respondents based on active/passive characteristics and behaviours, for both SNS use and music consumption:

Classification 1: Active Music Consumers / Active SNS Users

Classification 2: Active Music Consumers / Passive SNS Users

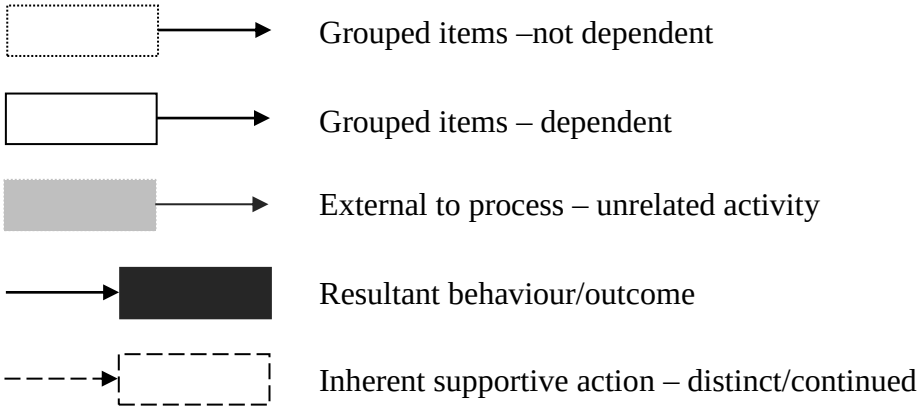
Classification 3: Passive Music Consumers / Passive SNS Users

Classification 4: Passive Music Consumers / Active SNS Users

The majority of the respondents were active music consumers and active users of social network sites. The active/active classification represents the users who are highly engaged in the process of consuming music using SNS and were very engaged in the process of consumption, while also displaying exploratory behaviours. On the other end of the spectrum were the passive music consumers and passive SNS uses. These users were least likely to explore and engage but were receptive to content in the SNS. All types of users undertook a variety of consumption activities, but active types often displayed a more engaged attitude than the passive types, and thus were implicated in more active and diverse behaviours. The combination types whether active/passive or passive/active, displayed either more engagement with music consumption than with SNS use and vice versa. These classifications were used to address the differences in behaviour across the two case sites and the four case groups.

Additionally, three activity process models, representing user activities, were developed based on: (1) active seeking, (2) passive encountering and (3) content sharing. Active seeking involves purposeful directed tasks while passive encountering is based on discoveries made when not actively seeking content. Content sharing is described as an outcome of both types of behaviours depending on the user and the discoveries that are made, but is also represented as its own activity based on the four types of sharing behaviours identified in the findings. These findings are outlined below and a diagram legend is presented to clarify the process model constructs.

Diagram Legend:



Active Seeking Process Model

For the active seeking process model, users begin their process of consumption with a known goal and continue in a directed purposeful manner. A user will search or explore within the SNS and any resulting discoveries may result in further sampling. Once discoveries have been made, a user may continue purposefully seeking content or share on discoveries; this sharing may be within the network or external to the network and may occur at the time of the discovery or at a later stage. Furthermore, a user may transition out of active seeking and into passive encountering if unexpected discoveries occur, not as a part of the current task.

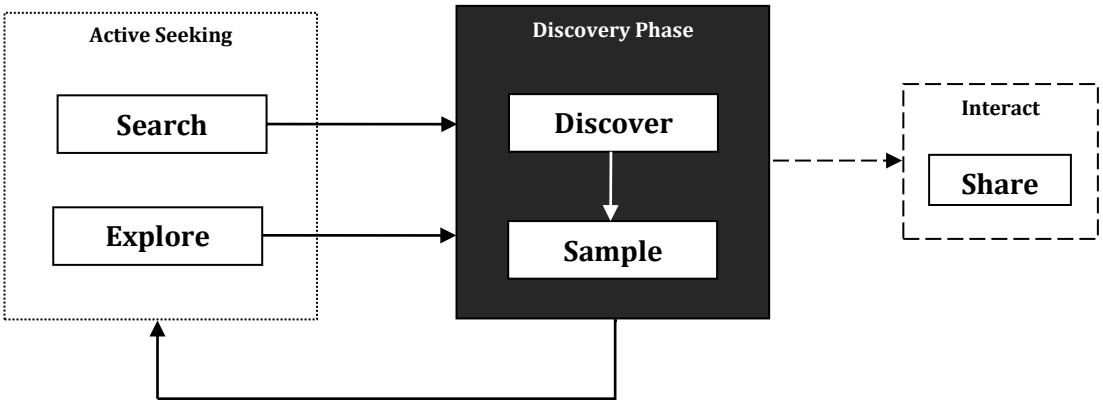


Figure 6-1: Active Seeking Process Model

Passive Encountering Process Model

Users encounter content in an SNS while not specifically seeking it. They may be exploring or browsing in a general way (distinct from music consumption). Once a serendipitous discovery is made, a user may engage in sampling tasks. These encounters may lead a user into an active seeking phase, to learn more about the accidental discovery, or they may share their discoveries on, again this sharing may be within the network or external to the network and may occur at the time of the discovery or at a later stage.

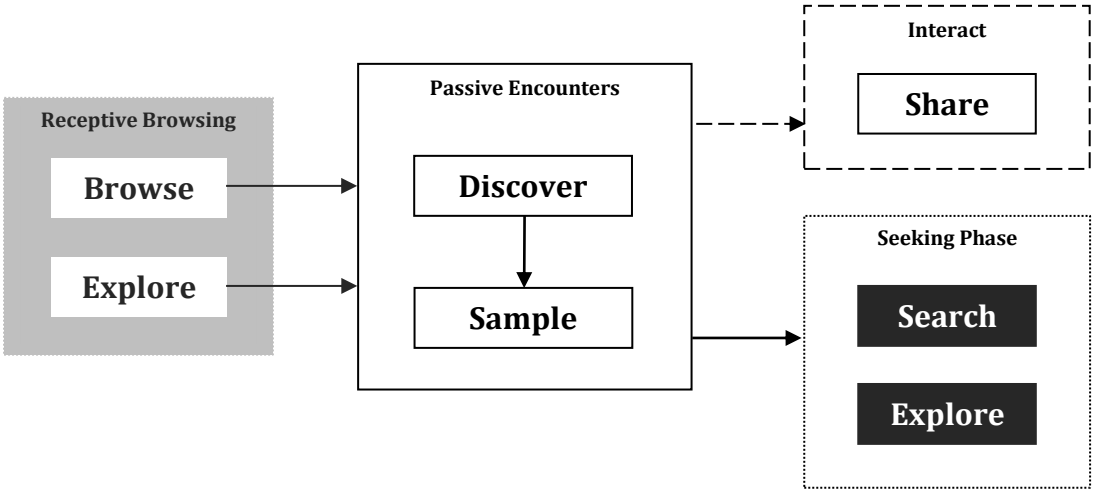


Figure 6-2 Passive Encountering Process Model

Content Sharing Process Model

The content sharing process model describes two forms or sharing, either from a task initiation perspective or as a result of discoveries from the two process models above. Four types of users were identified in the findings associated with the content sharing activity:

Type 1 – Initiators: sharing external content

Type 2 – Recruiters: sharing live gigs and events

Type 3 – Promoters: sharing promotional material

Type 4 – Propagators: sharing internal content

Type 1, 2, and 3 describe the act of creating and sharing content as a part of task initiation. Type 4 consists of users propagating a discovery within a network. Discoveries may also result in sharing a discovery on, externally to the system.

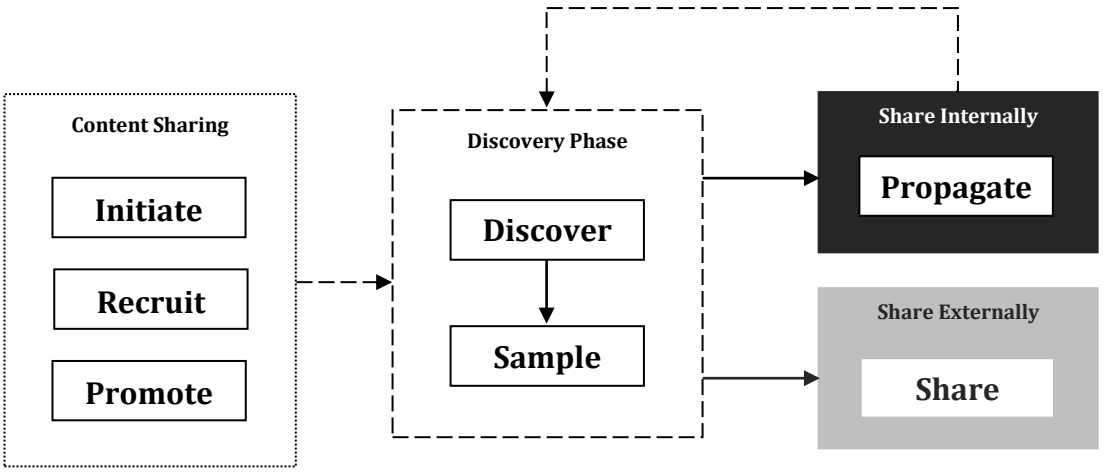


Figure 6-3: Content Sharing Process Model

6.3.2.2 Discussion of Research Question Two Findings

There is a wealth of research on information search and goal-oriented consumer behaviour (*cf.* Lumpkin and Dess, 2004; Novak *et al.*, 2003; Childers *et al.*, 2002; Wilson, 1999; Bloch *et al.*, 1986; Hirschman and Holbrook, 1982; Claxton *et al.*, 1974). Alternatively, the findings from this study have presented an additional aspect of consumer behaviour enabled by SNS, *i.e.* information encountering, which is underrepresented in the literature (*cf.* Erdelez, 1999). Music consumption does not just constitute a search and purchase cycle, but often involves unintentional discoveries that lead to future acquisition and sharing behaviours. This is particularly true in a social network site environment, as even though a user follows specific profile pages intentionally, what these profile pages post to the activity feed is unknown to the user. The activity feed provides an abundance of content in a range of formats, which is deemed relevant or irrelevant depending on a user's characteristics and their focus or interests on a given day.

The further distinction into active and passive behaviours is in line with previous literature which categorised (1) goal-directed consumption behaviours and (2) experiential consumption behaviours (*cf.* Novak *et al.*, 2003). Likewise, the study confirms that SNS users engage in both information seeking and information sharing behaviours (*cf.* Park *et al.*, 2014). However, this research presents a third behaviour: passive encountering. Previous research stated that information encountering involves serendipity as opposed to purposeful actions (*cf.* Erdelez, 1999). Passive encountering is a result of experiential consumption behaviours in an SNS not a part of the music consumption process (or when seeking something else), which then

result in an unexpected discovery. This study illustrated the effectiveness of SNS platforms for affording these behaviours. SNS are designed in such a way that promotes passive encountering. The majority of interview respondents positively reinforced the effectiveness of SNS for encountering music content when not specifically looking for it. Passive encountering is relevant to both music consumption and general SNS use and constituted one of the main activities for discovering music in SNS. It is worth noting that active SNS users who engaged in active seeking behaviours were also more likely to positively reinforce passive encountering – this may be because actively seeking bands to connect with and identifying music tastes in the network builds the profile and increases the effectiveness for discovering new and interesting content. This highlights the role that user characteristics play in mediating behaviour in the SNS.

Finally, the three activity process models reshape the previously defined 'music consumer activity cycle' (*cf.* Regner *et al.*, 2009) by splitting the cycle into two processes of activity, based on the intentions of the consumer at the start of the cycle (*i.e.* active seeking and passive encountering) and the process of activity at the end (*i.e.* content sharing). The active seeking and passive encountering process models overlay the pre-consumption phase of the music consumer activity cycle, by adding two types of consumer perspectives when instigating pre-consumption acts and any resulting behaviour. Additionally, by aligning the consumption of a user with their intentions at the beginning of the process it presents a more detailed understanding of user activity, as well as illustrating the process of consumption enabled by social network sites. It also displays the sharing behaviours in the post-consumption cycle, by detailing the types of sharing that are enabled by SNS. This research thus extends the knowledge of the music consumer activity cycle, by providing a richer picture of the pre and post consumption activities, which in some instances may completely bypass acquisition or purchase before sharing activities, occur.

6.3.2.3 Contribution of Research Question Two Findings

This study extends the knowledge of music consumption and cultural good consumption by providing a more complex representation via the three user activity process models. By describing activities based on a user's perspective when initiating a task, we have a richer understanding of task characteristics and

behaviours specifically afforded by social network sites. The addition of passive encountering, as a construct of consumer behaviour, is relevant to research concerning both music consumption and general SNS use. It is relevant to general SNS use, as passive encountering is an activity likely to be displayed by general SNS users for discovering content, implicating other cultural goods and utilitarian products and services in this context also. This study reconceptualised user activity and provided a richer representation of music consumption, specifically with regard to the previous music consumer activity cycle. It also presents two types of SNS users and two types of music consumers as active and passive types. Previous researchers identified SNS users as 'information sources', 'friends', and 'information seekers' (*cf.* Java *et al.,* 2007). This research applies the label active or passive to two types of activities as well as to specific users, who might identify as passive SNS users but conversely active music consumers. Furthermore, the study present measures in which to assess active/passive user types.

6.3.3 Research Question Three: *what are the affordances of SNS for the consumption of cultural goods?*

The fourth and final stage of the research process fully applies the concept of affordances by taking into account the technical artifact, a specific user group and the activities they engaged in (see Table 6-6). Thus, addressing research question three: what are the affordances of SNS for the consumption of cultural goods? Data was collected as a part of phase two of the research methodology. Two SNS case sites were selected: Twitter and Facebook. Users were sampled based on their involvement in a music group within both SNS.

RESEARCH PROCESS STAGE FOUR				
Stage	**Source**	**Tech.**	**User**	**Task**
4	**Interviews** --Chapter 5--	**High**	**High**	**High**
		Facebook and Twitter	SNS Users and Music Consumers	Music Consumption Activities

Table 6-6: Stage Four of the Research Process

The affordances derived at this stage are based on actual interactions with a system, for a particular purpose by a particular user group. The findings for this stage are presented in the section below.

6.3.3.1 Summary of Research Question Three Findings

The case study interviews resulted in seven affordances for the consumption of music using SNS. These affordances are divided into the three types of activities afforded: active seeking, passive encountering, and content sharing, as presented in Table 6-7.

ACTIVITY	AFFORDANCE
Active Seeking	**Affordance A** – Connection search and follow **Affordance B** – Connection search and explore **Affordance C** – Searching key terms
Passive Encountering	**Affordance D** – Browsing activity feed and discovering content **Affordance E** – Directed connection interactions
Content Sharing	**Affordance F** – Creating and sharing content **Affordance G** – Propagating internal content

Table 6-7: Affordances categorised based on activity

Each of these affordances resulted in a model representing the interplay between the artifact and the activity. The following sections summarise the findings for each affordance. After this summary, a theoretical research model is presented which amalgamates each affordance model and theorises the consumption of cultural goods using SNS with 14 propositions describing the hierarchies and relationships between the affordances and between the affordances and activities.

Affordance A – connection search and follow (Figure 6-4)

In this instance users search for a specific artist or page with the intention to add that pages' content to their timeline (including open public pages and private reciprocal relationships).

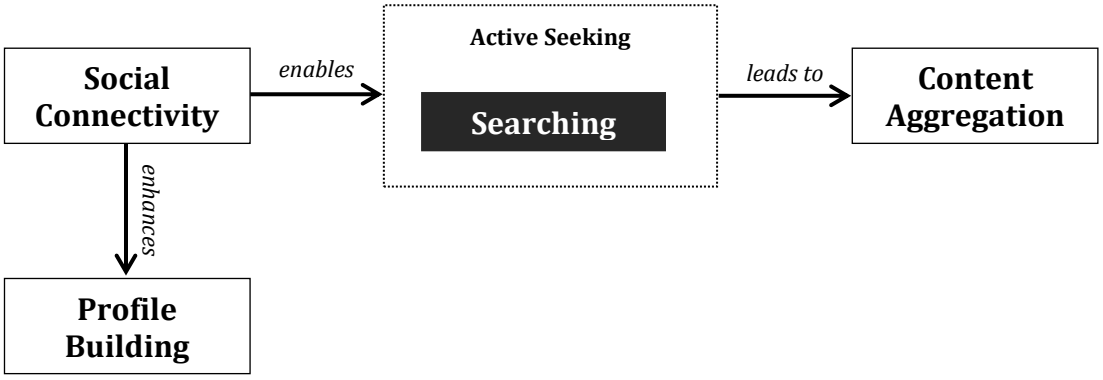


Figure 6-4: Affordance Model A – Connection Search and Follow

The ability to search and follow connections (Social Connectivity) enables a user to search (Actively Seek) for profiles to add to their timeline (Content Aggregation); by forming connections a user enhances their profile (Profile Building).

Affordance B – connection search and explore (Figure 6-5)

In this case, a user searches for a specific artist or page with the intention to explore the returned pages.

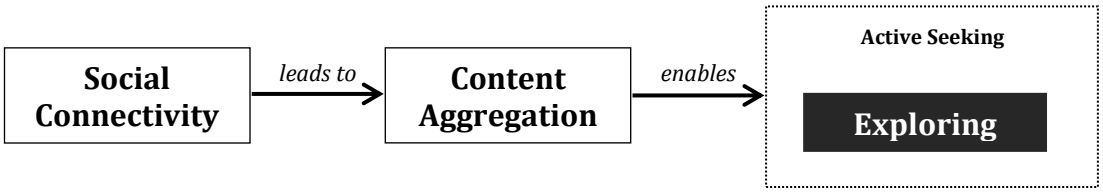


Figure 6-5: Affordance Model B – Connection Search and Explore

The ability to search connections (Social Connectivity) and browse the profile page or search results (Content Aggregation) enables a user to explore in a directed manner (Active Seeking).

Affordance C – searching key terms (Figure 6-6)

Users search for key words or for specific content (not specifically for an artist or a specific page). This was only evident in Twitter.

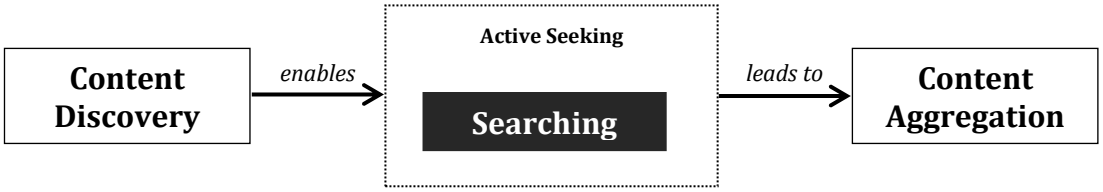


Figure 6-6: Affordance Model C – Searching Key Terms

The ability to search key terms (Content Discovery) enables a user to search for specific content (Actively Seek) which leads to the aggregation of content into a timeline (Content Aggregation).

Affordance D – browsing timeline and discovering content (Figure 6-7)

In this instance, users browse their timelines and encounter content that is posted in their network.

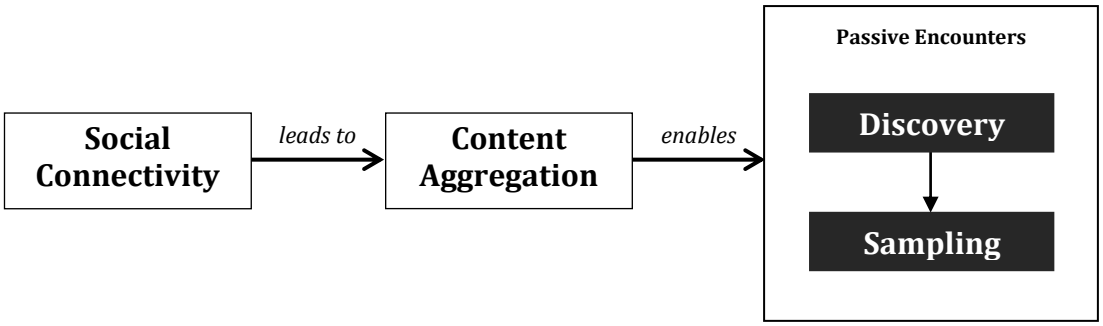


Figure 6-7: Affordance Model D – Browsing Activity Feed and Discovering Content

By connecting with users in a network (Social Connectivity) their activity is added to a timeline (Content Aggregation) which enables users to discover and sample music content (Passive Encounters).

Affordance E – directed connection interactions (Figure 6-8)

In this case users receive directed suggestions or recommendations from connections in their network (private or public).

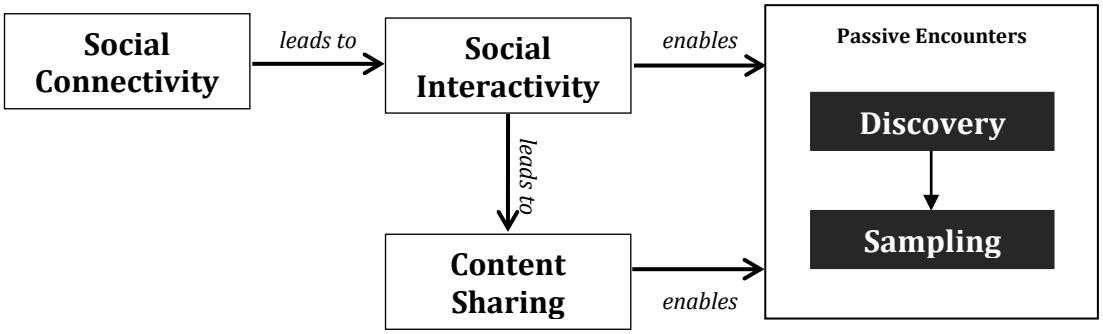


Figure 6-8: Affordance Model E – Directed Connection Interactions

The ability to connect with other users (Social Connectivity) enables a user to interact with connections (Social Interactivity) which may or may not include the act of sharing content (Content Sharing) all of which enables discovery and/or sampling (Passive Encounters).

Affordance F – creating and sharing content (Figure 6-9)

In this instance, users create and post content to their network. The source may include a variety of formats.

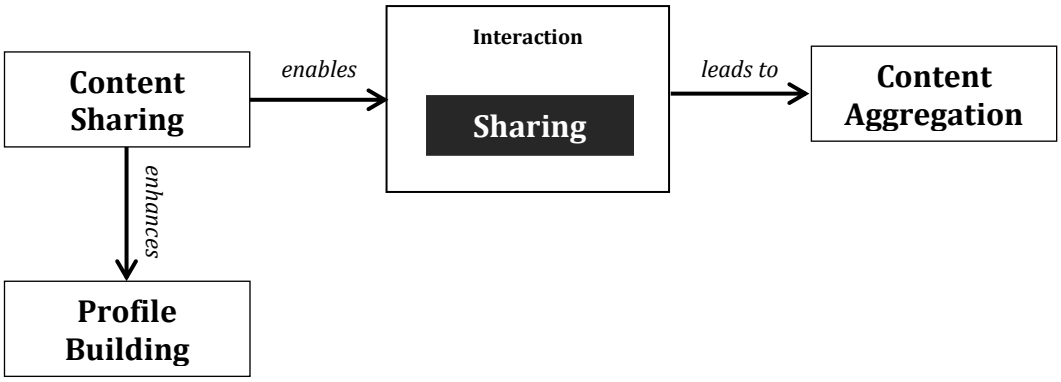


Figure 6-9: Affordance Model F – Creating and Sharing Content

The ability to share content (Content Sharing) in an SNS enables users to create and post content (Sharing Interactions) from a variety of sources, this enhances profile building (Profile Building) and aggregates the content into a timeline (Content Aggregation) which further enhances future discoveries and/or sampling activities.

Affordance G – Propagating internal content (Figure 6-10)

In this case, users repost content to their network from a discovery within the social network site.

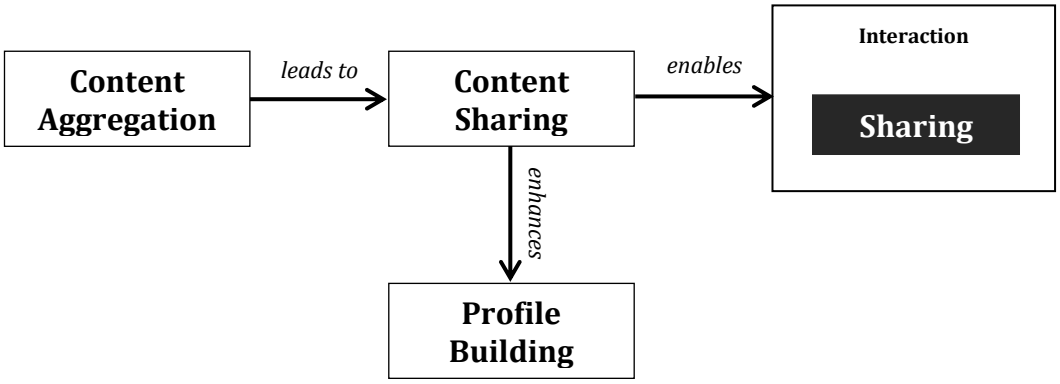


Figure 6-10: Affordance Model G – Propagating Internal Content

When content is aggregated in a timeline (Content Aggregation), a user is given the capability to further propagate the content internally in the system (Content Sharing) which enables users to share content with their group of followers (Sharing Interaction) and additionally enhances their profile (Profile Building).

Next, Table 6-8: presents each model construct, a definition, and examples of its empirical indicators. Each construct is presented in the theoretical research model displayed in Figure 6-11 which theorises the use of SNS for the consumption of cultural goods.

Construct	Definition	Example Empirical Indicators of Model Constructs
Profile Building	*Profile Building* is the ability to create, manage, and update a profile page, includes personal information and user activity	▪ Users create a profile ▪ Users add profile information ▪ Users manage profile settings ▪ Users edit profile details
Social Connectivity	*Social Connectivity* is the ability to search and connect with people, pages, groups and networks	▪ Users form reciprocal connections ▪ Users form unidirectional connections ▪ Users search for connections ▪ Users are suggested connections
Social Interactivity	*Social Interactivity* is the ability to interact and communicate with a group of connections	▪ Users interact asynchronously with connections including: comments and posts ▪ User interact synchronously with connections including: instant messaging and video/voice calling ▪ Users rate interactions from connections
Content Discovery	*Content Discovery* is the ability to search or browse for specific content	▪ Users search for key terms/trends ▪ Users browse search results ▪ User filter search results
Content Sharing	*Content Sharing* is the ability to share content with a group of connections	▪ Users create and share content from external sources in a variety of formats ▪ Users share/propagate content from internal sources in a variety of formats
Content Aggregation	*Content Aggregation* is the ability to access or create aggregated forms of content	▪ Users access activity/content feeds ▪ Users filter activity/content feeds ▪ Users create specific activity/content feeds
Search	The *Search* construct involves goal-directed information seeking behaviours whereby users deliberately search for information and content	▪ Users search for specific content including: information, products, updates, companies, public figures, key terms, *etc.*
Explore	The *Explore* construct involves experiential information seeking behaviours whereby users explore or browse for information and content	▪ Users explore/browse for content in a directed manner ▪ Users explore/browse for content in an undirected manner
Discover	The *Discover* construct involves accessing new and unfamiliar information/content and updating beliefs through learning	▪ Users discover content specifically sought ▪ Users discover content because of receptive behaviours ▪ User discover content serendipitously
Sample	The *Sample* construct involves experiencing a direct source of information/content	▪ Users sample/experience content including: watching videos, listening to audio, viewing images, reading extracts, *etc.*
Share	The *Share* construct involves creating and publishing content through social interaction with others	▪ Users create and share content ▪ Users reshare/repost content ▪ Users share openly to the community ▪ Users share with a bounded group/individual

Table 6-8: Constructs and Empirical Indicators

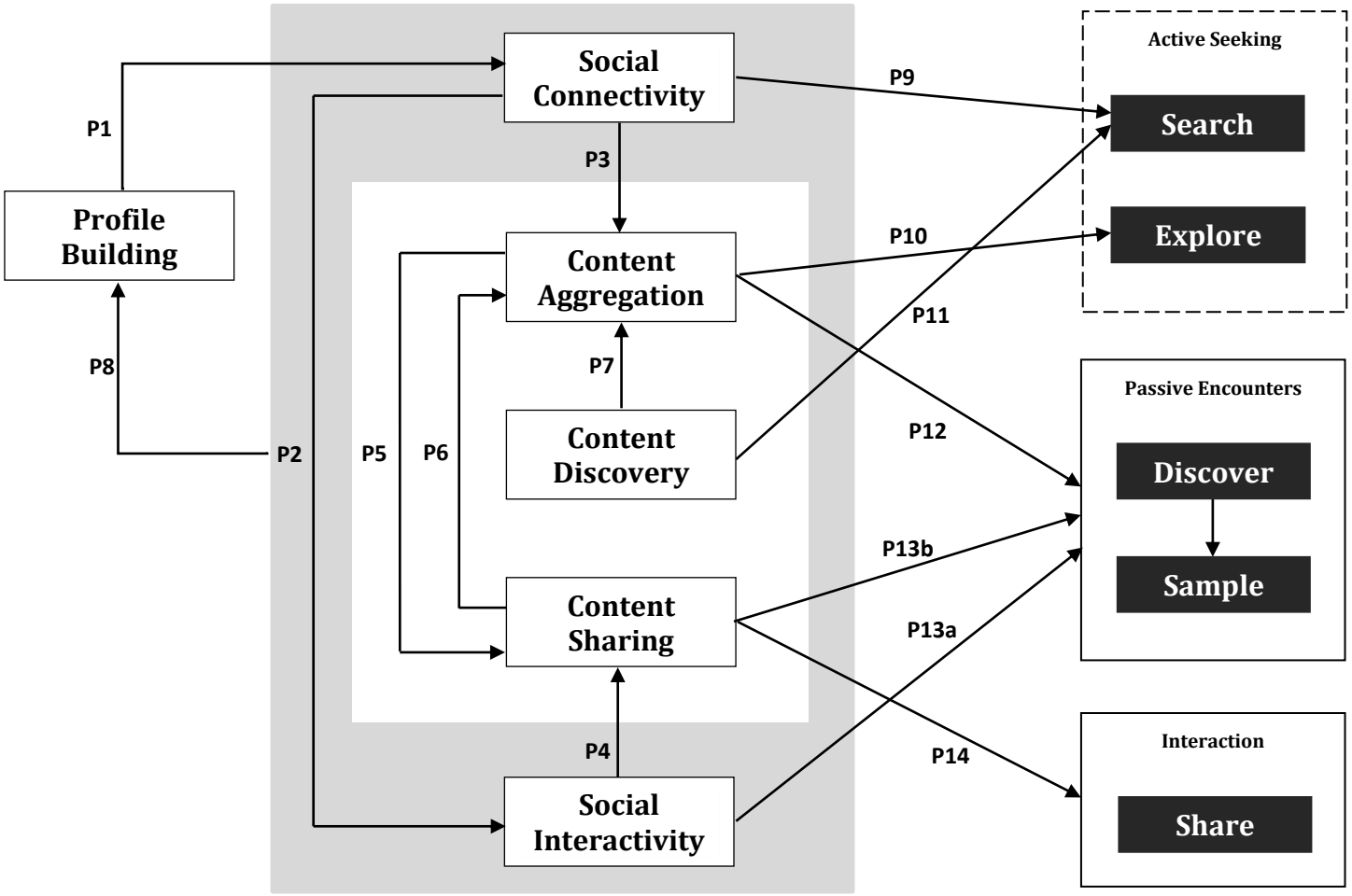


Figure 6-11: Theoretical Research Model for the Consumption of Cultural Goods Using SNS

The theoretical research model includes 14 propositions describing the dependencies between the affordances and between the affordances and user activities. The first eight propositions are related to the relationships and hierarchies of the social and content affordances. The final six propositions described the relationship between affordances and user activities.

The analysis of Affordance Model A revealed that the *Social Connectivity* affordance is dependent on the *Profile Building* affordance. From this analysis proposition one is set forth:

Proposition 1: *Profile Building* is a prerequisite for *Social Connectivity*

The analysis of Affordance Model E revealed that the *Social Interactivity* affordance is dependent on the *Social Connectivity* affordance. From this analysis proposition two is set forth:

Proposition 2: *Social Connectivity* is the basis for enabling *Social Interactivity*

The analysis of Affordance Models A, B, and D revealed that the *Content Aggregation* affordance is dependent upon the *Social Connectivity* affordance. From this analysis proposition three is set forth:

Proposition 3: *Social Connectivity* results in *Content Aggregation*

The analysis of Affordance Model E revealed that the *Content Sharing* affordance is dependent on the *Social Interactivity* affordance. From this analysis proposition four is set forth:

Proposition 4*:* *Social Interactivity* is the basis for enabling *Content Sharing*

The analysis of affordance model G revealed that the *Content Aggregation* affordance promotes and enables the *Content Sharing* affordance. From this analysis proposition five is set forth:

Proposition 5: *Content Aggregation* enhances *Content Sharing*

The analysis of Affordance Model F revealed that the *Content Aggregation* affordance is dependent on the *Content Sharing* affordance. From this analysis proposition six is set forth:

Proposition 6: *Content Sharing* is a prerequisite for *Content Aggregation*

The analysis of Affordance Model C revealed that the Content Discovery affordance leads to the *Content Aggregation* affordance. From this analysis proposition seven is set forth:

> **Proposition 7:** *Content Discovery* results in *Content Aggregation*

The analysis of Affordance Models A, F, and G revealed *Social Connectivity* and *Content Sharing* (and thus *Social Interactivity*) enhances the *Profile Building* affordance. From this analysis proposition eight is set forth:

> **Proposition 8:** *Social Connectivity* and *Social Interactivity* enhances *Profile Building*

The analysis of Affordance Model A revealed that the *Social Connectivity* affordance facilitates users to *Search* for connections. From this analysis proposition nine is set forth:

> **Proposition 9:** *Social Connectivity* facilitates users to *Search* for connections

The analysis of Affordance Model B revealed that the *Content Aggregation* affordance facilitates users to *Explore* connection information and content. From this analysis proposition ten is set forth:

> **Proposition 10:** *Content Aggregation* facilitates users to *Explore* connection information and content

The analysis of Affordance Model C revealed that the *Content Discovery* affordance facilitates users to *Search* for content. From this analysis proposition eleven is set forth:

> **Proposition 11:** *Content Discovery* facilitates users to *Search* for content

The analysis of Affordance Model D revealed that the *Content Aggregation* affordance facilitates users to *Discover* and *Sample* content. From this analysis proposition twelve is set forth:

> **Proposition 12:** *Content Aggregation* facilitates users to *Discover* and *Sample* content

The analysis of Affordance Model E revealed that the *Social Interactivity* and *Content Sharing* affordances facilitate users to *Discover* and *Sample* content. From this analysis proposition thirteen is set forth:

Proposition 13a: *Social Interactivity* facilitates users to *Discover* and *Sample* content

Proposition 13b: *Content Sharing* facilitates users to *Discover* and *Sample* content

The analysis of Affordance Models F and G revealed that the *Content Sharing* affordance facilitates users to interact and *Share* content. From this analysis proposition fourteen is set forth:

Proposition 14: *Content Sharing* facilitates users to interact and *Share* content

The interview findings are discussed in the following section before presenting the contributions to research and theory.

6.3.3.2 Discussion of Research Question Three Findings

Affordances were applied to the research phenomenon to understand how users perceived the capabilities of a specific technical artifact (SNS) for a particular purpose (*i.e.* consuming music). In this study, users perceived different capabilities and used the SNS for consuming music in different ways. This allowed the research to see, not just a set of technical features for social network sites and their intended functionality – though we now have a more comprehensive view of these – but additionally to see how users decided to use the artifact based on their own perceptions, and what they actually did in this environment given a set of tasks.

Depending on a user's perspective when initiating a music consumption task or general SNS use, the choice to search for music or just to browse the timeline affected the potential actions or affordances in accordance with the literature. Functional affordances, as defined by Markus and Silver (2008), are shaped by the perceptions of a specific user group and by the environment in which a task is set. Social network systems afford certain behaviours, but as evidenced, some individuals used the SNS with differing objectives and behaviours based on their perspective. For example, users who were heavily invested in music discovery – more likely a part of the general music group – were more active and more intensely involved in music consumption in the SNS and in SNS usage overall. These users displayed many of the behaviours and attitudes associated with active seeking. As a

result of these active seeking behaviours, they were also more positive overall about music consumption in SNS and were more likely to share content. Users who are more engaged in the network and with continuous identity building enhance their SNS experience. In contrast, users at the lower activity and intensity levels, while still mentioning receptive attitudes to browsing/exploring tasks, they had a reduced ability to access the multitude of content available to a more engaged social user. They were often less involved in the process – because of fewer social and content connections in general.

Learning goes hand-in hand with the use of SNS. As a user interacts with these systems in an active exploratory way, the better they become at using the system and acquiring value from the system. This is in line with the 'Process Model of User-Artifact Interactions' (*cf.* Al-Natour and Benbasat, 2009). Individual users who continuously interact with the system are more likely to display positively deviant performances (*cf.* Pascale *et al.*, 2010; Zeitlin *et al.*, 1990) and form evolving beliefs about the use of SNS that continues to develop as use continues. This is an opportunity for future research to study affordances as a user continues to engage with a system over time. As a user interacts with a system and learns about a system, these experiences influence future interactions. Hence, prior experiences affect the formulation and evolution of affordances. This degree of interaction relates to the concept of 'apparent' and 'emergent' affordances from previous literature (*cf.* Gaver, 1991). As users engage with an artifact their understanding of the system's capabilities grow either matching that of the design or creating new emergent affordances.

In the original definition, affordances arise from the mental interpretation of the things about us based on our past knowledge; this view encapsulates the perception of a set of users in the context of a particular system (*cf.* Norman, 1988). In order to study affordances, extant literature has emphasised the relationship between an artifact and a particular user group and the perception that results (*cf.* Markus and Silver, 2008). However, in order to study this, interaction and action play an important role in mapping affordances. Because of the nature of information systems and their existence in the digital rather than physical world, symbols and learned behaviours guide interactions. Hence, users approach new technologies with preconceptions about functionality and capability – it is through interaction that

these beliefs are formed and updated (*cf.* Al-Natour and Benbasat, 2009). What a user knows and what their intentions are, will affect the direction that a user pursues. It also continues the idea that interactions (and the acceptance/rejection of a perceived affordance) leads to information indicating new affordances, *i.e.* sequential and nested affordances (*cf.* Gaver 1991). "Users' choices in how to employ an IT artifact affect which of the artifact's features they become exposed to. At minimum, they directly affect what the artifact can achieve" (Al-Natour and Benbasat, 2009, p. 662).

Even though each SNS provided search capabilities in line with the literature and the system inventory findings (*cf.* Cha *et al.*, 2007; Mislove *et al.*, 2006), users did not perceive this as an affordance for seeking music content. Conversely, many users felt constrained by the search functionality and had specific ideas about what you could use the search feature for and how to use it. Thus, this affordance was perceptible to users but there was a mismatch between what they expected and what they were able to do, which suggests a 'false affordance' (*cf.* Gaver, 1991). As a result, many users expressed a preference for browsing the timeline as opposed to actively searching for music content. Furthermore, it was mentioned that different web tools are more appropriate for this activity. When search was undertaken, users mentioned that it was necessary to be very specific and directed in order to access the most appropriate content. In the case of music, this meant that specific musicians or music pages should be searched, as opposed to more general search terms like music genres or broad key terms. However, even when specific search was instigated it was constrained by the fact that a large amount of search results can be returned, without a mechanism to filter them for relevant content.

Furthermore, when search was afforded, users did so with the intention to locate a profile page in order to connect with it. This supports prior research and the system inventory findings associated with social connectivity (*cf.* Trusov *et al.*, 2009; boyd and Ellison, 2007; Acquisti and Gross, 2006). Many users stated that they followed music pages to learn about new/old artists and to access music content and any future updates. This finding is aligned with the pre-consumption behaviours in the music consumer activity cycle (*cf.* Regner *et al.*, 2009). Users followed music pages based on their tastes and additionally based on the reputation of a profile holder, this finding supports the literature on cultural good consumption, whereby consumption

is culturally dependant and subject to individual tastes and preferences (*cf.* Molteni and Ordanini, 2003; Throsby, 2003; Flew, 2002; Caves, 2000). Our understanding is improved by identifying that a user's beliefs on reputation and tastes are built over time in an SNS, through continuous interactions. Like the literature, forming connections was sometimes based on a user's prior knowledge or recommendations from a trusted source (*cf.* Chu, 2013; Setterstrom and Pearson, 2010; Hennig-Thurau *et al.*, 2004).

Users also conducted search with the intention to explore or browse the profile page of another user. This was less pervasive than searching for a connection with the intention to connect, but may be a first step in deciding who to follow, by exploring a profile pages' activity and content updates. Additionally, users may have already formed a connection and are just browsing a user's profile for a particular purpose. Similarly, users sometimes undertook this activity to find/re-find specific content. This affordance relates to the consumer behaviour literature describing goal-directed browsing behaviours (*cf.* Novak *et al.*, 2003; Bloch *et al.*, 1986; Holbrook and Hirschman, 1982; Claxton *et al.*, 1974) and provides a more comprehensive view of this particular behaviour within an SNS.

The literature states that users can search for key terms in SNS (*cf.* Cha *et al.*, 2007; Mislove *et al.*, 2006). However, it was only associated with Twitter, as its search engine enables users to search within a post's content. While, in contrast, Facebook did not afford this capability to users, as it only allows people to search for other people and pages[8]; it does not enable content search within user posts, and therefore only negative associations were revealed in this context. Two themes emerged for this affordance: (1) users browse 'mentions' in the list of posts returned from a username query and (2) users search for specific updates and trends. Both of these activities implicate tagging in the search process (*cf.* Golder and Huberman, 2006; Marlow *et al.*, 2006). Tagging is used to group content together and can reference either very broad or very specific terms depending on the user who creates the tag; and thus is unpredictable. In the first instance, a profiles' username is synonymously a tag, known as a 'mention' (*i.e.* @guardianmusic), any post or mention of this username is aggregated into a timeline of results when searched for; this relates to

[8] Facebook has recently enabled users to search for 'hashtagged' terms; the 'autoshare' mechanism enables users to post Twitter updates to the Facebook profile (and vice versa)

the content aggregation affordance in the system inventory and the literature surrounding activity feeds (*cf.* Naaman *et al.*, 2010; Burke *et al.*, 2009). In contrast with the literature, these activity feeds are structured around the search term results and not based on whom the user is connected with (or a recommendation system), these activity feeds are instigated by a users' seeking activity. In the second instance users search for updates and trends, this could range in the type of content sought through the use of search terms or 'hashtags' (*i.e.* tagged content). Again, the results are aggregated into a timeline for the user to browse. Like the previous active seeking affordances, the user engages in goal-directed browsing behaviours and has access to content outside of their network. This capability enables users to find content from all of the posts in Twitter related to their search topic. However, without a filtering mechanism search results can be very broad and require insight and judgement from the user to locate relevant content, hence the negative associations with searching for music using the social network sites.

The most prevalent activity afforded to SNS users was the ability to browse the timeline and discover content. This enabled passive encountering to occur. These timelines aggregate the activity from all of a user's connections (*cf.* Naaman *et al.*, 2010; Burke *et al.*, 2009). Thus, the findings in the system inventory for social connectivity and content aggregation is supported. This functionality of an SNS is associated with user's encountering content serendipitously (*cf.* Race, 2012; Piao and Whittle, 2011; Mislove *et al.*, 2006; Erdelez, 1999). Initially, as evidenced above, users seek profiles to connect with based on tastes and reputation, but after forming a connection the resulting posts in the activity feed could relate to anything, and may be relevant or irrelevant to the user. Thus, the activity feed is a mechanism that enables users to discover content, while also updating their beliefs about reputation and shared tastes. This corresponds with the profile building affordance described in the system inventory. As users share content with their network, an image based on self-disclosure and self-presentation (*cf.* Kietzmann *et al.*, 2011; Ong *et al.*, 2011; Kaplan and Haenlein, 2010) is conveyed to other users, who form judgments based on the activity, which can occur as they browse their activity feed. Thus, the content users choose to share impacts the image they want to convey, as their activity is aggregated into an 'exhibition' for other users to consume (*cf.* Hogan, 2010).

Being able to browse the activity feed and discover content has enabled users to form closer relationships with artists/musicians (and content providers in general). It has also created an immediacy of content delivery, as activity unfolds in real-time when content is posted to the network. Furthermore, this content can be accessed and sampled from within the network (in some cases users are directed to external sources). These discoveries are the basis for further music consumption tasks, and enable a user to filter their timeline according to the people and interests most suited to them. It also provides the basis of future sharing behaviours. A user can propagate content internally at the time of a discovery, sharing the content to their group of connections. Otherwise, these discoveries result in future seeking and sharing behaviours, as they encounter more and more content. Users share this content, not only to present their image but also because of reciprocity and the wide reach available to them. However, users are aware of the negative repercussions on reputation when trying to deliver relevant content to a diverse audience, and temper their behaviours in the SNS based on this implicit characteristic of SNS communities.

Social network sites are an important element in the music consumption process. They represent a valuable source of music content and enable users to enhance serendipitous discoveries as well as tailor content for specific tastes. A social network site can be extremely effective for word-of-mouth exchanges and creates closer links between music producers and music consumers – altering the relationship between creators and consumers by adding intimacy and more direct access. Additionally, social network sites facilitate rich and transparent interactions between connected music consumers – known or unknown – enhancing the spread of content and the diversity of information. This is in direct contrast with traditional mass marketing strategies which appeal to a wide variety of consumers with a less diverse offering. Music is a unique product and mass marketing is sometimes a disadvantage, as it can result in demand reversal where music is deemed mainstream and overexposed, and thus undesirable (*cf.* Molteni and Ordanini, 2003). This is because music is a part of a person's identity and the tastes an individual expresses are correspondingly an expression of who they are.

SNS is a platform with the ability to present this identity and share it with others. It is also a way of aggregating interesting and relevant content, and virally propagating

it through a network of users. Hence, SNS are crucial for sharing and discovering music in the new music economy. However, identity construction is an important aspect of SNS and has repercussions for the different types of profile pages held, whether personal pages or public company pages. The study confirms the importance of building identity through SNS profile pages whereby users control identity perceptions to enhance their reputation and develop and maintain connection relationships (*cf.* Velasco-Martin, 2011; Kaplan and Haenlein, 2010; Lamb and Davidson, 2002; Moore and Benbasat, 1991). However, the study also extends our understanding by implicating profile and identity building in influencing other activities user engage in, such as forming connections, interacting with connections, and liking content.

By actively building an identity and engaging in information disclosure, users open up opportunities within the network for future discoveries. The more active and engaged a user is, the more personalised the profile becomes, and content and connections become tailored to meet these needs. Actively forming connections and disclosing interests creates opportunities to engage with other connections who share these interests. If a user does not engage in active profile building by disclosing information and content, their social influence is decreased and other users are less likely to engage and share with them. Likewise for companies, building an image and reputation is key to engaging with customers and creating an interactive and relevant dialogue, so important in the use of social media platforms for promotion and marketing. The literature states that a user has expectations about who the audience is, which ultimately influences self-presentation (*cf.* Lamb and Davidson, 2002), and this was confirmed in the findings. But the findings also highlight how continuous interaction on an SNS evolves a user's self-presentation and self-disclosure depending on the connections a user forms, the interactions that occur, and the activity a user engages in. This presents itself through the 'dependencies' of the affordances which relate to their hierarchical relationship; whereby the social affordances enable the content affordances, and the content affordances enhance the social affordances, as illustrated in the theoretical research model.

Thus, in relation to the affordances literature the findings confirm the existence of sequential and nested affordances (*cf.* Gaver, 1991) – affordances that are grouped in space and indicate further affordances. Designers create affordances in a hierarchy

that may not map onto system functions but lead to more affordances (*cf.* McGrenere and Ho, 2000), also known as core and tangential (i.e. secondary) affordances (*cf.* Lee, 2010). In both social and content affordances there are hierarchies of affordances. These hierarchies consist of core affordances that lead to the optional use of other secondary affordances. For example, the aggregation of content into an activity feed is a core affordance of content aggregation, and a secondary affordance is the ability to post a reply on content displayed in the activity feed (social interactivity); one activity may lead to another. Likewise, social connectivity and social interactivity enhances profile building. By actively engaging and contributing in the network, a user automatically builds their profile and creates a representation that is presented to their connections.

The ability to build and evolve a profile allows users to access and sift through a multitude of information. These networks enable people to become information receptors. A social network's timeline feature aggregates posts from users into an activity/content feed facilitating users to explore and discover. It is both the activity/content feed feature and a user's connection choices which greatly impact the ability to create value from an SNS – for encountering relevant or interesting information. These platforms are integrating with various web technologies and are becoming an important way of communicating and interacting with others. Some people are more likely to share, others to perceive; it is this mutually beneficial relationship that enables music discovery. It also enables artists and businesses to directly interact with consumers (as long as they are willing to connect) which have supported new relationships to form between musicians and music fans. Music discussions now take place online, enhancing the richness of music conversations with the ability to post links to audio content, videos or other relevant information. Sampling digital content provides instant access to information, enhancing learning and decision making behaviours of individuals. These technologies are not replacing traditional forms of music consumption; instead, they add a new layer of interaction for a consumer. Music fans use SNS to complement and enhance fundamental music consumption activities. SNS are relevant for content discovery and as importantly are an integral aspect of daily life – music related or not.

6.3.3.3 Contribution of Research Question Three Findings

By applying affordances to the consumption of music using SNS, this research not only contributes to the consumer behaviour and social media literature, but also provides a process of applying the concept of affordances in future studies. Moreover, this study outlined seven affordance models that represent the artifact-activity interplay, integrating the findings from both phases of data collection. These simple parsimonious affordance models can be applied to other social media technologies in the study of other cultural goods; as well as leveraging the models in other research spaces. The study contributes to user-artifact interaction theory by describing the interplay between task, technology, and users. Furthermore, the findings extend our empirical knowledge, with seven affordances, affordance models and their descriptions, but also extend our theoretical knowledge regarding the relationship of affordance structures. By abstracting the affordance models, a theoretical research model for the consumption of cultural goods has been presented, along with 14 propositions which can be tested and validated using other research techniques, whether qualitative or quantitative methods. This research model contains 11 constructs with formal definitions and empirical indicators, substantiating the system inventory findings and providing measures for future research. This expands the previous affordance and activity definitions and provides the basis for the theorisation of the consumption of cultural goods using SNS. This theory contributes to both the study of SNS and the study of user behaviour in these spaces. These propositions can be tested and validated in future studies. Eight propositions describe the affordance-affordance relationships and hierarchies, highlighting the interplay between nested and sequential affordances and the importance of active engaged user-artifact interactions in social network site use. In addition, six propositions regarding the activity-affordance relationships are outlined, demonstrating which affordances enable which consumption behaviour, completing the theorisation of the consumption of cultural goods using SNS. This theory contributes to our understanding of the use of technical artifacts in the realm of hedonic experiential behaviours and represent user-artifact interactions.

6.4 Study Contributions

The objective of this research was to theorise the use of social network sites for the consumption of cultural goods. In answering the study's research questions, a number of contributions are offered to research. Given the lack of existing research in this area, this study makes a number of contributions to the literature on social network sites and music consumption, as well as the application of the theory of affordances. We are now better equipped to understand user actions and the structure and design of SNS systems. Table 6-9 presents an overview of these research contributions.

Firstly, this study addresses the research objective by contributing a theoretical research model for the consumption of cultural goods using SNS. This model has 11 constructs with empirical indicators and presents 14 propositions. Eight propositions describe the dependencies between the affordances and their relationship and hierarchies. The affordance relationship model and eight associated propositions are useful in the study of SNS and other social media with social networking capabilities. This theory is useful for understanding SNS use as well as the design and structure of SNS systems. The other six propositions relate to the interaction between the affordances and the activities. This theory enables researchers to understand user interaction with a system through the tasks that are afforded and the features that enable them. Likewise, the overarching theoretical research model, can be used to study the use of SNS for the consumption of other cultural goods as well as applying the theory to other research areas and other social media technologies for comparative purposes.

In addition to the theoretical research model, seven affordance models illustrating specific user-artifact interactions have been presented which are useful to the study of social network sites and consumer behaviour, specifically in the music industry or other cultural good industries. These models provide a simple way of presenting the user-artifact interactions and can be leveraged for other studies applying the theory of affordances. It is also a parsimonious way of illustrating the process of system use and can be used to identify and compare other affordances of SNS in other research contexts.

BACKGROUND RESEARCH	RESEARCH OUTCOME	CONTRIBUTION TO RESEARCH
Six generic SNS Affordances for general SNS in the context of general users and tasks	18 technical features and their functionalities and instantiations	▪ A set of empirical constructs and comprehensive list of technical SNS features ▪ Substantiated theory on affordance hierarchies and relationships
General SNS user and music consumer characteristics	Four active/passive user types based on active/passive music consumption and active passive SNS use	▪ Richer view of users via a set of user classifications for use in future research ▪ Demarcation of user types based on measurable constructs: SNS use intensity and music consumption intensity
Six consumption tasks divided into three activities	Three activity process models: active seeking, passive encountering, and content sharing	▪ Reconceptualised user activity with three activity process models contributing to theories of consumer behaviour ▪ More complex view of user behaviour and task interaction ▪ Detailed view of use intentions and resulting behaviours
Non-existent affordances for the consumption of cultural goods using SNS	Seven affordances of SNS for the consumption of music	▪ Better understanding of the use of SNS in the music consumption process ▪ Seven empirical affordance models displaying activity- artifact interaction ▪ Contribution to user-artifact interaction theory by describing interplay between task and technology ▪ Theoretical research model of the consumption of cultural goods with 14 propositions and 11 constructs and empirical indicators ▪ Eight propositions for the affordance relationships and hierarchies ▪ Six propositions for the affordance-activity relationships ▪ Extended theoretical knowledge of affordances by identifying method for applying concept to research

Table 6-9: Summary of Research Contributions

Along with the 11 constructs and empirical indicators, a system inventory providing a comprehensive list of 18 technical features, a description of their functionality, and examples of their instantiations, have been provided. These features have been categorised into social and content affordances and these measures can be used in other studies of SNS and social media technologies. This research provided a

comprehensive examination of SNS and their features and add to our understanding of SNS functionality and the design and structure of these systems. This provides a deeper understanding of the way people are encouraged to interact with an SNS based on its design and its intended affordances.

This study extends our understanding of music consumption and cultural good consumption by presenting three activity process models that represent a more complete view of consumer behaviour. SNS are used in this new process of consumption, but there has been no research that theorises the way which users have integrated these technologies into the existing music consumption process. It is also useful in understanding the role of identity in the consumption process, and how it impacts on the discovery and sharing of content. This research can be applied to the consumption of other cultural goods impacted by the move online. The study's findings can be compared with other studies to investigate if the behaviours afforded by SNS are also afforded in other research contexts for other goods and services. Passive encountering is an important aspect of word-of-mouth exchanges, and because these exchanges are occurring on a much larger scale between disparate and diverse individuals, this aspect of consumption is relevant to research on consumer behaviour and for the study of social media.

6.5 Implications and Future Research

This chapter has interpreted the findings of the study to assess the significance with regard to existing knowledge. In light of this, the implications of the study for both research and practice are presented in this section. This chapter concludes by outlining the potential limitations of the research study.

6.5.1 Implications for Research

The eleven contributions described in the last section have implications for (1) researchers investigating this topic specifically, (2) SNS researchers, (3) cultural goods and music researchers, and (4) researchers using affordances as a lens.

Firstly, for researchers investigating this topic, the measures including the 11 constructs and empirical indicators, the 18 technical features from the system inventory, and the seven affordance models and theoretical research model can be used in future research to validate and replicate the findings through quantitative and

qualitative research methods. Alternatively, these measures can be used to further investigate actual use and emergent behaviours.

There is a shared implication for SNS researchers and researchers of cultural goods (and music) with the demarcation of user types based on measurable constructs. For SNS researchers, measures for SNS use intensity have been provided, and additionally a more complex view of user behaviour within social network sites has been described. These findings can be used in other research topics concerning SNS and social media use in general. In addition, SNS researchers can use the set of empirical constructs and comprehensive list of technical SNS features to investigate factors affecting design aspects of SNS. Moreover, the hierarchies and relationships of the SNS affordances can be used to study the complementary structures of SNS functionality.

For researchers of cultural goods, a more complex view of user behaviour and task interaction has been provided. More specifically, music researchers can use the user activity process models when examining music consumption activities in other contexts; it can also be applied to other cultural goods for comparative reasons. Music consumers and their characteristics can be studied using the measures for music consumption intensity, which can be applied to other research topics. The study provided a more comprehensive understanding of consumers' intentions at the initiation of task and any resultant behaviours. This knowledge can be applied to the study of behaviours that evolve over time or based on a user's characteristics.

For researchers using affordances as a lens, the study design, with four stages of applying the theory of affordances to characterise the task, technology, and user characteristics, is a repeatable case study protocol that could be used to investigate other user-artifact interactions in different research contexts. Furthermore, the updated understanding of affordance hierarchies and affordance structures could be investigated further to understand how these affordances map out and convey their message to users. In addition, the parsimonious way of mapping affordances can be applied to other research contexts and leveraged to illustrate the relationships and dependencies between the technical artifact and user tasks. These models illustrate both the staged process and the user-artifact interactions by highlighting the dependencies between the technology and the actions a user undertakes.

6.5.2 Implications for Practice

A system inventory of technical features is presented along with 11 model constructs and empirical indicators which SNS providers can utilise when designing or restructuring SNS. Moreover, this study examines social network sites, whose features are being added to a number of technical artifacts, as sociality grows ever more important it is relevant for both hedonic and utilitarian systems. Another implication for practice is the presentation of three activity process models that describe the steps that users undertake when seeking, discovering, and sharing content. In the context of SNS providers, features and functionalities can be assessed for compatibility with behaviours users are currently displaying. SNS providers can thus adapt features that afford specific capabilities instead of constraining user behaviour. In addition, the findings establish that music promoters must put into place strategies to encourage the accessibility of content, both by active seeking mechanisms and passive encountering. They must also consider the 'shareability' of content that is posted – to ensure that propagation amongst network connections is enabled and stimulated.

This study establishes that affordances for the consumption of cultural goods using SNS vary greatly to affordances of traditional communication mediums. SNS providers can use the seven affordances to identify how SNS platforms can be improved, in the context of communication practices as well as the organisation and structure of content displays. These affordances are useful to SNS providers by illustrating where disparities in user behaviours are occurring and if it is the fault of the interface design or perhaps the structure of the system. For example, it has been illustrated that Facebook's search mechanism is not ideal and many users expressed negative opinions about using Facebook for both searching and browsing for specific content. Facebook can reassess features related to these behaviours based on the findings. Furthermore, SNS providers can use the findings of the research to understand their user base by comparing how they intend the system to be used versus how it has been adopted by users.

Additionally, as SNS are effective for the consumption of music, music producers and industry members should consider the nature of music consumption when utilising SNS in its marketing strategy because of factors like social contagion and demand reversal. SNS provides word-of-mouth abilities far in excess of offline

mechanisms. Therefore, it can be both a boon and a curse to cultural goods where taste is so dependent upon intrinsic social factors. It is also evident that users are seeking music content from other SNS users not a part of the music industry. Some users are influential sharers who have the ability to affect a large group of network connections. These users should be considered when managing brand reputation in online platforms.

Furthermore, with the contribution of specific user types, both active and passive SNS users may shed light for practitioners on the diversity of SNS users and the best way to engage with them. For example, SNS designers may be encouraged to account for design features that engage both types of users. In the second instance, active and passive types of music consumers are relevant to music producers, musicians, and other music related practitioners, who can create strategies to address different types of users in their marketing and promotional mix, to engage both passive and active music consumers more effectively. Dedicated music sites, geared specifically for music consumption, are relevant to active engaged music consumers, but SNS provide both active and passive consumers an abundant source of music content and information, and are thus equally relevant.

6.5.3 Potential Limitations and Future Research Opportunities

The case studies implemented in this study provided sufficiently rich detail of the technology, user, and task characteristics appropriate in applying the lens of affordances to the research context. Axiologically speaking, the core criteria in which to address reliability and construct validity were addressed by the design of the study and the methods selected to answer the research questions. Although the study achieved its research objective, it is necessary to identify potential limitations and future research opportunities.

Firstly, the scope of the study was bounded by music as an exemplar cultural good; the researcher contends that other cultural goods be studied to establish the viability of the research findings in other contexts. Likewise, specific social network sites were the focus of the study, in order to generalise to other social network sites and social media applications, an examination of other technologies should be considered. This way, other researchers could build on the findings presented here and gain a better understanding of how affordances shape user-artifact interactions

based on differing goals and motivations. In addition, it would present a better understanding of the role of other types of technologies in the consumption of cultural goods.

The researcher acknowledges that the study did not take into account the long term effects of user-artifact interactions. Based on the findings, a longitudinal study examining the evolution of affordances from when a user first adopts a technology versus long time use is relevant in understanding how affordances change over time and thus impact user behaviour. Additionally, four types of users were identified in the case study interviews, active/passive SNS users and music consumers, spread disproportionately across the case sites and groups that were sampled. Future studies could use criterion sampling to specifically identify these types of users to explore the role of these classifications in mediating user behaviour in the context of music consumption and SNS use.

Finally, discourse analysis of actual user interactions within SNS for the consumption of music would have provided an additional source for data collection not based on recall and self-reporting by an interview respondent. Discourse analysis is an opportunity for future research to compare the findings in this study with observable actions within the case sites.

BIBLIOGRAPHY

Abrams, D., Baecker, R., & Chignell, M. (1998, January). Information archiving with bookmarks: personal Web space construction and organization. In *Proceedings of the SIGCHI conference on Human factors in computing systems*(pp. 41-48). ACM Press/Addison-Wesley Publishing Co.

Acquisti, A., & Gross, R. (2006, January). Imagined communities: Awareness, information sharing, and privacy on the Facebook. In *Privacy enhancing technologies* (pp. 36-58). Springer Berlin Heidelberg.

Adomavicius, G., & Tuzhilin, A. (2005). Toward the next generation of recommender systems: A survey of the state-of-the-art and possible extensions. *Knowledge and Data Engineering, IEEE Transactions on*, *17*(6), 734-749.

Agarwal, R. (2000). Individual acceptance of information technologies. *Framing the domains of IT management: Projecting the future through the past*, 85-104.

Agichtein, E., Castillo, C., Donato, D., Gionis, A., & Mishne, G. (2008, February). Finding high-quality content in social media. In *Proceedings of the 2008 International Conference on Web Search and Data Mining* (pp. 183-194). ACM.

Ahlqvist, T., Bäck, A., Heinonen, S., & Halonen, M. (2010). Road-mapping the societal transformation potential of social media. *foresight*, *12*(5), 3-26.

Ahn, Y. Y., Han, S., Kwak, H., Moon, S., & Jeong, H. (2007, May). Analysis of topological characteristics of huge online social networking services. In*Proceedings of the 16th international conference on World Wide Web* (pp. 835-844). ACM.

Alexa (2011). Alexa Page Rank Statistics. Available at: http://www.alexa.com/ topsites. Last accessed June, 2011.

Allsop, D. T., Bassett, B. R., & Hoskins, J. A. (2007). Word-of-mouth research: principles and applications. *Journal of Advertising Research*, *47*(4), 398.

Al-Natour, S., & Benbasat, I. (2009). The adoption and use of IT artifacts: A new interaction-centric model for the study of user-artifact relationships. *Journal of the Association for Information Systems*, *10*(9), 2.

Anderson, C. (2006) The long tail – how endless choice is creating unlimited demand. Random House Business Books, London.

Apple (2010). Apple Introduces iTunes 10 With Ping. Press Release Sep 1, 2010. Available at:http://www.apple.com/pr/library/2010/09/01itunes.html. Last Accessed Dec. 2, 2010.

Avison, D. E., & FitzGerald, G. (1995). Information systems development: methodologies, techniques and tools. *Information systems*.

Avison, D., & Myers M. (2005). Qualitative Research. (Avison, David, Jan Pries-Heje, Ed.). *Research in Information Systems: A handbook for research supervisors and their students*. 239-253.

Bærentsen, K. B., & Trettvik, J. (2002, October). An activity theory approach to affordance. In *Proceedings of the second Nordic conference on Human-computer interaction* (pp. 51-60). ACM.

Baird, C. H., & Parasnis, G. (2011). From social media to social customer relationship management. *Strategy & Leadership*, *39*(5), 30-37.

Balaban, D. (2001). Battle of the Music Industry: The Distribution of Audio and Video Works Via the Internet, Music and More, The. *Fordham Intell. Prop. Media & Ent. LJ*, *12*, 235.

Baskerville, R. L. (1999). Investigating information systems with action research. *Communications of the AIS*, *2*(3es), 4.

Bauxmann, P., Pohl, G., Johnscher, P., Strube, J., & Groffmann, H. D. (2005). Strategies for Digital Music Markets: Pricing and the Effectiveness of Measures against Pirate Copies-Results of an Empirical Study. *ECIS 2005 Proceedings*, 116.

Beekhuyzen, J., & von Hellens, L. (2008). How does Technology Influence Online Music Access and Use? A Taxonomy of Empirical Studies. *ACIS 2008 Proceedings*, 70.

Beer, D. (2006). The pop-pickers have picked decentralised media: The fall of top of the pops and the rise of the second media age. *Sociological Research Online*, *11*(3).

Beer, D. (2008). Making friends with Jarvis Cocker: Music culture in the context of Web 2.0. *Cultural Sociology*, *2*(2), 222-241.

Benbasat, I., Goldstein, D. K., & Mead, M. (1987). The case research strategy in studies of information systems. *MIS Quarterly*, 369-386.

Benbasat, I., & Zmud, R. W. (2003). The identity crisis within the IS discipline: Defining and communicating the discipline's core properties. *MIS Quarterly*, 183-194.

Benkler, Y. (2006). *The wealth of networks: How social production transforms markets and freedom*. Yale University Press.

Beugelsdijk, S., & Smulders, S. (2003). Bridging and bonding social capital: Which type is good for economic growth. *The cultural diversity of European unity, findings, explanations and reflections from the European values study*, 147-184.

Bhattacharjee, S., Gopal, R. D., & Sanders, G. L. (2003). Digital music and online sharing: software piracy 2.0?. *Communications of the ACM*, *46*(7), 107-111.

Bhattacherjee, A. (2001). Understanding information systems continuance: an expectation-confirmation model. *MIS Quarterly*, 351-370.

Bloch, P. H., Sherrell, D. L., & Ridgway, N. M. (1986). Consumer search: an extended framework. *Journal of consumer research*, 119-126.

Bockstedt, J., Kauffman, R. J., & Riggins, F. J. (2005, January). The move to artist-led online music distribution: Explaining structural changes in the digital music market. In *System Sciences, 2005. HICSS'05. Proceedings of the 38th Annual Hawaii International Conference on* (pp. 180a-180a). IEEE.

Bockstedt, J. C., Kauffman, R. J., & Riggins, F. J. (2006). The move to artist-led online music distribution: a theory-based assessment and prospects for structural changes in the digital music market. *International Journal of Electronic Commerce*, *10*(3), 7-38.

Boffo, C., & Barki, H. (2003). Conceptualizing information system use: A behavioral and perceptual framework. *Cahier du GReSI no, 3*, 05.

Boulos, M. N., Maramba, I., & Wheeler, S. (2006). Wikis, blogs and podcasts: a new generation of Web-based tools for virtual collaborative clinical practice and education. *BMC medical education*, *6*(1), 41.

Bounie, D., Bourreau, M., & Waelbroeck, P. (2005, June). Pirates or Explorers? Analysis of Music Consumption in French Graduate Schools. In *Annual Congress of the Society for Economic Research on Copyright Issues, Montreal.* Available at: http://www. serci. org/documents.html.

boyd, d. m. and Ellison, N. B. (2007), Social Network Sites: Definition, History, and Scholarship. Journal of Computer-Mediated Communication, 13: 210–230.

Bradner, E. (2001, March). Social affordances of computer-mediated communication technology: understanding adoption. In *CHI'01 Extended Abstracts on Human Factors in Computing Systems* (pp. 67-68). ACM.

Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of interactive marketing*, *21*(3), 2-20.

Bryant, T. (2006). Social software in academia. *Educause quarterly*, *29*(2), 61.

Brynjolfsson, E., Hu, Y., & Smith, M. D. (2003). Consumer surplus in the digital economy: Estimating the value of increased product variety at online booksellers. *Management Science*, *49*(11), 1580-1596.

Burgoon, J. K., Bonito, J. A., Ramirez, A., Dunbar, N. E., Kam, K., & Fischer, J. (2002). Testing the interactivity principle: Effects of mediation, propinquity, and verbal and nonverbal modalities in interpersonal interaction. *Journal of communication*, *52*(3), 657-677.

Burke, M., Marlow, C., & Lento, T. (2009, April). Feed me: motivating newcomer contribution in social network sites. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 945-954). ACM.

Burrell, G., & Morgan, G. (1979). *Sociological paradigms and organisational analysis* (Vol. 248). London: Heinemann.

Carlson, J. R., & Zmud, R. W. (1999). Channel expansion theory and the experiential nature of media richness perceptions. *Academy of management journal*, *42*(2), 153-170.

Castells, M. (2006). The Network Society: from Knowledge to Policy. In Castells, M., In Cardoso G. and Cardoso G. (Eds.) *The Network Society: from Knowledge to Policy* (pp. 3-22), Washington, DC: Center for Transatlantic Relations.

Caves, R. E. (2000). *Creative industries: Contracts between art and commerce* (No. 20). Harvard University Press.

Cecez-Kecmanovic, D. (2001). Doing critical IS research: The question of methodology. *Qualitative research in IS: Issues and trends*, 141-162.

Cenfetelli, R. T., Benbasat, I., & Al-Natour, S. (2008). Addressing the what and how of online services: Positioning supporting-services functionality and service quality for business-to-consumer success. *Information Systems Research*,*19*(2), 161-181.

Cha, J. (2009). Shopping on social networking Web sites: Attitudes toward real versus virtual items. *Journal of Interactive Advertising*, *10*(1), 77-93.

Cha, M., Haddadi, H., Benevenuto, F., & Gummadi, P. K. (2010). Measuring User Influence in Twitter: The Million Follower Fallacy. *ICWSM*, *10*, 10-17.

Cha, M., Kwak, H., Rodriguez, P., Ahn, Y. Y., & Moon, S. (2007, October). I tube, you tube, everybody tubes: analyzing the world's largest user generated content video system. In *Proceedings of the 7th ACM SIGCOMM conference on Internet measurement* (pp. 1-14). ACM.

Cha, M., Mislove, A., & Gummadi, K. P. (2009, April). A measurement-driven analysis of information propagation in the flickr social network. In *Proceedings of the 18th international conference on World wide web* (pp. 721-730). ACM.

Chatti, M. A., Jarke, M., & Frosch-Wilke, D. (2007). The future of e-learning: a shift to knowledge networking and social software. *International journal of knowledge and learning*, *3*(4), 404-420.

Cheng, X., Dale, C., & Liu, J. (2007). Understanding the characteristics of internet short video sharing: YouTube as a case study. *arXiv preprint arXiv:0707.3670*.

Cheng, J., Adamic, L., Dow, P. A., Kleinberg, J. M., & Leskovec, J. (2014, April). Can cascades be predicted?. In *Proceedings of the 23rd international conference on World wide web* (pp. 925-936). International World Wide Web Conferences Steering Committee.

Cheung, C. M., Lee, M. K., & Rabjohn, N. (2008). The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research*, *18*(3), 229-247.

Chevalier, J. A., & Mayzlin, D. (2006). The effect of word of mouth on sales: Online book reviews. *Journal of marketing research*, *43*(3), 345-354.

Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2002). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of retailing*, *77*(4), 511-535.

Choi, D., Kim, J., Piao, X., & Kim, P. (2013). Text Analysis for Monitoring Personal Information Leakage on Twitter. *J. UCS*, *19*(16), 2472-2485.

Chu, S. C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *International Journal of Advertising*, *30*(1), 47-75.

Chu, S. C., Kamal, S., & Kim, Y. (2013). Understanding consumers' responses toward social media advertising and purchase intention toward luxury products. *Journal of Global Fashion Marketing*, *4*(3), 158-174.

Chu, S. C. (2011). Viral advertising in social media: Participation in Facebook groups and responses among college-aged users. *Journal of Interactive Advertising*, *12*(1), 30-43.

Chui, M., Miller, A., & Roberts, R. P. (2009). Six ways to make Web 2.0 work. *The McKinsey Quarterly*, *7*, 1-7.

Claxton, J. D., Fry, J. N., & Portis, B. (1974). A taxonomy of prepurchase information gathering patterns. *Journal of consumer research*, 35-42.

Coates, T. (2003). My working definition of social software. *Plasticbag.org*, *8*.

Cooper, A., Reimann, R., & Cronin, D. (1995). About face. *The Essentials of User Interface Design*, 42, John Wiley & Sons.

Correa, T., Hinsley, A. W., & De Zuniga, H. G. (2009). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior*, *26*(2), 247-253. doi:10.1016/j.chb.2009.09.003

Creswell, J. W., & Clark, V. L. P. (Eds.). (2011). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage.

Crook, C., Fisher, T., Graber, R., Harrison, C., Lewin, C., Logan, C., Luckin, R., Oliver, M. & Sharples, M. (2008). Web 2.0 technologies for learning: The

current landscape - opportunities, challenges and tensions. *BECTA Research Report*.

Cunningham, S. D. (2002). From cultural to creative industries: Theory, industry, and policy implications. *Media international Australia incorporating culture and policy: quarterly journal of media research and resources*, (102), 54-65.

Cunningham, S. J., Reeves, N., & Britland, M. (2003, May). An ethnographic study of music information seeking: implications for the design of a music digital library. In *Proceedings of the 3rd ACM/IEEE-CS joint conference on Digital libraries* (pp. 5-16). IEEE Computer Society.

Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management science*, *32*(5), 554-571.

Dalsgaard, C. (2006). Social software: E-learning beyond learning management systems. *European Journal of Open, Distance and E-Learning*, *2006*(2).

Davern, M. J. (2007). Towards a unified theory of fit: task, technology and individual. *Information System Foundations: Theory, Representation and Reality, The Australian National University E Press, Canberra*, 49-69.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace1. *Journal of applied social psychology*, *22*(14), 1111-1132.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.

DCMS (Department of Culture, Media, Sport, UK Government) (2001). *Creative Industries Mapping Document*, London. Available at: http://www.culture.gov.uk/reference_library/publications/4632.aspx).

Denzin, N. K., & Lincoln, Y. S. (2000). The discipline and practice of qualitative research. *Handbook of qualitative research*, *2*, 1-28.

Denzin, N. K., Lincoln, Y. S., & Giardina, M. D. (2006). Disciplining qualitative research 1. *International Journal of Qualitative Studies in Education*, *19*(6), 769-782.

DeSanctis, G., & Poole, M. S. (1994). Capturing the complexity in advanced technology use: Adaptive structuration theory. *Organization science*, *5*(2), 121-147.

DiMaggio, P., Hargittai, E., Neuman, W. R., & Robinson, J. P. (2001). Social implications of the Internet. *Annual review of sociology*, 307-336.

DiMicco, J., Millen, D. R., Geyer, W., Dugan, C., Brownholtz, B., & Muller, M. (2008, November). Motivations for social networking at work. In *Proceedings of the 2008 ACM conference on Computer supported cooperative work* (pp. 711-720). ACM.

Dolfsma, W. (2000). How will the music industry weather the globalization storm?. *First Monday*, *5*(5).

Dryer, D. C., Eisbach, C., & Ark, W. S. (1999). At what cost pervasive? A social computing view of mobile computing systems. *IBM Systems Journal*, *38*(4), 652-676.

Duan, W., Gu, B., & Whinston, A. B. (2008). The dynamics of online word-of-mouth and product sales—An empirical investigation of the movie industry. *Journal of retailing*, *84*(2), 233-242.

Dubé, L., & Paré, G. (2001). Case research in information systems: current practices, trends, and recommendations. *Cahier du GReSI no*, *1*, 12.

Dubé, L., & Paré, G. (2003). Rigor in information systems positivist case research: current practices, trends, and recommendations. *MIS Quarterly*, 597-636.

Eirinaki, M., & Vazirgiannis, M. (2001). Ontologies in Web Personalisation (Invited Talk). *Program Chairs and Organizing Committee*, 1.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, *14*(4), 532-550.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, *12*(4), 1143-1168.

Erdelez, S. (1999). Information encountering: It's more than just bumping into information. *Bulletin of the American Society for Information Science and Technology*, *25*(3), 26-29.

Erickson, B. H. (1996). Culture, class, and connections. *American Journal of Sociology*, 217-251.

Facebook (2013). Facebook Reports Third Quarter 2013 Results. Available at: http://investor.fb.com/releasedetail.cfm?ReleaseID=802760. Last Accessed 2013.

Field, H. (1982). Realism and relativism. *The Journal of Philosophy*, 553-567.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison-Wesley Reading, MA.

Fisher, C. W., Chengalur-Smith, I., & Ballou, D. P. (2003). The impact of experience and time on the use of data quality information in decision making. *Information Systems Research*, *14*(2), 170-188.

Fitzgerald, B., & Howcroft, D. (1998). Towards dissolution of the IS research debate: from polarization to polarity. *Journal of Information Technology*, *13*, 313-326.

Fitzgerald, B., & Howcroft, D. (1998, December). Competing dichotomies in IS research and possible strategies for resolution. In *Proceedings of the*

international conference on information systems (pp. 155-164). Association for Information Systems.

Flew, T. (2002). Beyond ad hocery: defining creative industries.

Flew, T., & Cunningham, S. (2010). Creative industries after the first decade of debate. *The Information Society*, *26*(2), 113-123.

Friedlander, F. (1983). Patterns of individual and organizational learning. *The executive mind*, 192-220.

Gable, G. G. (1994). Integrating case study and survey research methods: an example in information systems. *European journal of information systems*, *3*(2), 112-126.

Gaffney, M., & Rafferty, P. (2009). Making the long tail visible: social networking sites and independent music discovery. *Program: electronic library and information systems*, *43*(4), 375-391.

Galloway, S., & Dunlop, S. (2007). A critique of definitions of the cultural and creative industries in public policy. *International journal of cultural policy*, *13*(1), 17-31.

Garnham, N. (2005). From cultural to creative industries: An analysis of the implications of the "creative industries" approach to arts and media policy making in the United Kingdom. *International journal of cultural policy*, *11*(1), 15-29.

Gaver, W. W. (1991, March). Technology affordances. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 79-84). ACM.

Garton, L., Haythornthwaite, C., & Wellman, B. (1997). Studying online social networks. *Journal of Computer-Mediated Communication*, *3*(1), 0-0.

Germonprez, M., & Zigurs, I. (2009). Task, technology, and tailoring in communicative action: An in-depth analysis of group communication. *Information and organization*, *19*(1), 22-46.

Gibson, J. J. (1977). The theory of affordances. *Hilldale, USA*.

Gibson, J. J. (1979). The Ecological Approach to Visual. *Perception*.

Giddens, A. (1979). *Central problems in social theory: Action, structure, and contradiction in social analysis* (Vol. 241). Univ of California Press.

Gill, P., Arlitt, M., Li, Z., & Mahanti, A. (2007, October). YouTube traffic characterization: a view from the edge. In *Proceedings of the 7th ACM SIGCOMM conference on Internet measurement* (pp. 15-28). ACM.

Godwin-Jones, R. (2003). Emerging Technologies: Blogs and wikis: Environments for on-line collaboration. *Language Learning & Technology*, *7(2)*, 12-16.

Golder, S. A., & Huberman, B. A. (2006). Usage patterns of collaborative tagging systems. *Journal of information science*, *32*(2), 198-208.

Goodchild, M. F. (2000). Communicating geographic information in a digital age. *Annals of the Association of American Geographers*, *90*(2), 344-355.

Goodhue, D. L., & Thompson, R. L. (1995). Task-technology fit and individual performance. *MIS Quarterly*, 213-236.

Google (2011). DoubleClick AdPlanner. Available at: http://www.google.ie/doubleclick/. Last Accessed 2011.

Gopal, R. D., Bhattacharjee, S., & Sanders, G. L. (2006). Do Artists Benefit from Online Music Sharing?. *The Journal of Business*, *79*(3), 1503-1533.

Gosain, S., & Lee, Z. (2001). The Internet and the reshaping of the music CD market. *Electronic Markets*, *11*(2), 140-145.

Graham, G., Burnes, B., Lewis, G. J., & Langer, J. (2004). The transformation of the music industry supply chain: A major label perspective. *International Journal of Operations & Production Management*, *24*(11), 1087-1103.

Grange, C., & Benbasat, I. (2010, January). Online social shopping: The functions and symbols of design artifacts. In *System Sciences (HICSS), 2010 43rd Hawaii International Conference on* (pp. 1-10). IEEE.

Green, H., & Hannon, C. (2007). Their space. *Education for a Digital Generation. London: Demos (p18-69)*.

Gregor, S. (2005). The struggle towards an understanding of theory in information systems. *Information Systems Foundations: Constructing and Criticising (Hart, D. and S. Gregor, Eds.)*, 3-11.

Gross, R., & Acquisti, A. (2005, November). Information revelation and privacy in online social networks. In *Proceedings of the 2005 ACM workshop on Privacy in the electronic society* (pp. 71-80). ACM.

Guba, E. G. (Ed.). (1990). *The paradigm dialog*. Sage Publications.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, *2*, 163-194.

Guba, E. G., & Lincoln, Y. S. (2000). Epistemological and methodological bases of naturalistic inquiry. In *Evaluation models* (pp. 363-381). Springer Netherlands.

Hacking, I. (1983). *Representing and intervening: Introductory topics in the philosophy of natural science* (Vol. 5, No. 1). Cambridge: Cambridge University Press.

Hair, J. F., Money, A. H., Samouel, P. and Page, M. (2007). *Research methods for business*, John Wiley & Sons West Sussex.

Halbert, D. J. (2009). Public lives and private communities: The terms of service agreement and life in virtual worlds. *First Monday*, *14*(12).

Hargittai, E. (2007). Whose space? Differences among users and non- users of social network sites. *Journal of Computer- Mediated Communication*, *13*(1), 276-297.

Hartline, J., Mirrokni, V., & Sundararajan, M. (2008, April). Optimal marketing strategies over social networks. In *Proceedings of the 17th international conference on World Wide Web* (pp. 189-198). ACM.

Häubl, G., & Trifts, V. (2000). Consumer decision making in online shopping environments: The effects of interactive decision aids. *Marketing science*, *19*(1), 4-21.

Healy, K. (2002). Survey article: digital technology and cultural goods. *The journal of political philosophy*, *10*(4), 478-500.

Heiman, A., McWilliams, B., Shen, Z., & Zilberman, D. (2001). Learning and forgetting: Modeling optimal product sampling over time. *Management Science*,*47*(4), 532-546.

Hendler, J., & Golbeck, J. (2008). Metcalfe's law, Web 2.0, and the Semantic Web. *Web Semantics: Science, Services and Agents on the World Wide Web*,*6*(1), 14-20.

Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet?. *Journal of interactive marketing*, *18*(1), 38-52.

Hirschheim, R. (1985). Information systems epistemology: An historical perspective. *Research methods in information systems*, 13-35.

Hirschheim, R., & Klein, H. K. (1992). Paradigmatic influences on information systems development methodologies: Evolution and conceptual advances. *Advances in computers*, *34*, 293-392.

Hirschheim, R., & Klein, H. K. (1989). Four paradigms of information systems development. *Communications of the ACM*, *32*(10), 1199-1216.

Hirschheim, R., Klein, H. K., & Lyytinen, K. (1995). Information systems development and data modeling: conceptual and philosophical foundations.

Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: emerging concepts, methods and propositions. *The Journal of Marketing*, 92-101.

Hoegg, R., Martignoni, R., Meckel, M., & Stanoevska-Slabeva, K. (2006). Overview of business models for Web 2.0 communities. *Proceedings of GeNeMe*, *2006*, 23-37.

Hogan, B. (2010). The presentation of self in the age of social media: Distinguishing performances and exhibitions online. *Bulletin of Science, Technology & Society*, 0270467610385893.

Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: consumer fantasies, feelings, and fun. *Journal of consumer research*, 132-140.

Hotho, A., Jäschke, R., Schmitz, C., & Stumme, G. (2006, July). BibSonomy: A social bookmark and publication sharing system. In *Proceedings of the Conceptual Structures Tool Interoperability Workshop at the 14th International Conference on Conceptual Structures* (pp. 87-102).

Hsu, C. L., & Lin, J. C. C. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. *Information & Management*, *45*(1), 65-74.

Huang, C. Y. (2003). File sharing as a form of music consumption. *International Journal of Electronic Commerce*, *9*(4), 37-55.

Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization science*, *2*(1), 88-115.

Huberman, B. A., Romero, D. M., & Wu, F. (2009). Crowdsourcing, attention and productivity. *Journal of Information Science*.

Huberman, B. A., Romero, D. M., & Wu, F. (2008). Social networks that matter: Twitter under the microscope. *arXiv preprint arXiv:0812.1045*.

Hutchby, I. (2001). Technologies, texts and affordances. *Sociology*, *35*(2), 441-456.

Hwang, Y., & Kim, D. J. (2007). Customer self-service systems: The effects of perceived Web quality with service contents on enjoyment, anxiety, and e-trust.*Decision support systems*, *43*(3), 746-760.

Iivari, J. (2000). Information Systems Development as Knowledge Work: The body of systems development process knowledge. *Information Modelling and Knowledge Bases XI*, *61*, 41.

Iivari, J., Hirschheim, R., & Klein, H. K. (1998). A paradigmatic analysis contrasting information systems development approaches and methodologies.*Information Systems Research*, *9*(2), 164-193.

Jansen, B. J., Zhang, M., Sobel, K., & Chowdury, A. (2009). Twitter power: Tweets as electronic word of mouth. *Journal of the American society for information science and technology*, *60*(11), 2169-2188.

Jarrett, K. (2008). Interactivity is Evil! A critical investigation of Web 2.0. *First Monday*, *13*(3).

Jarvenpaa, S. L., & Staples, D. S. (2000). The use of collaborative electronic media for information sharing: an exploratory study of determinants. *The Journal of Strategic Information Systems*, *9*(2), 129-154.

Java, A., Song, X., Finin, T., & Tseng, B. (2007, August). Why we Twitter: understanding microblogging usage and communities. In *Proceedings of the 9th WebKDD and 1st SNA-KDD 2007 workshop on Web mining and social network analysis* (pp. 56-65). ACM.

Jones, M. R., & Karsten, H. (2003). Review: Structuration theory and information systems research. *Judge Institute of Management Working Paper*, (11).

Jones, S. (Ed.). (1998). *Doing Internet research: Critical issues and methods for examining the Net*. Sage Publications.

Jothi, P. S., Neelamalar, M., & Prasad, R. S. (2011). Analysis of social networking sites: A study on effective communication strategy in developing brand communication. *Journal of Media and Communication Studies*, *3*(7), 234-242.

Jung, Y., & Kang, H. (2010). User goals in social virtual worlds: A means-end chain approach. *Computers in Human Behavior*, *26*(2), 218-225.

Juul, J. (2007, September). A certain level of abstraction. In *Situated play: DiGRA 2007 conference proceedings* (pp. 510-515). DiGRA Japan.

Kane, G. C., & Alavi, M. (2008). Casting the net: A multimodal network perspective on user-system interactions. *Information Systems Research*, *19*(3), 253-272.

Kane, G. C., Alavi, M., Labianca, G., & Borgatti, S. P. (2014). What's different about social media networks? A framework and research agenda. *MIS Quarterly*, *38*(1), 275-304.

Kane, G. C., & Fichman, R. G. (2009). The shoemaker's children: using Wikis for information systems teaching, research, and publication (includes comments and editorial note). *Management Information Systems Quarterly*, *33*(1), 3.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons*, *53*(1), 59-68.

Kaplan, A. M., & Haenlein, M. (2011). Two hearts in three-quarter time: How to waltz the social media/viral marketing dance. *Business Horizons*, *54*(3), 253-263.

Kavanaugh, A., Carroll, J. M., Rosson, M. B., Zin, T. T., & Reese, D. D. (2005). Community networks: Where offline communities meet online. *Journal of Computer-Mediated Communication*, *10*(4), 00-00.

Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business horizons*, *54*(3), 241-251.

KissMetrics (2011). KissMettrics Social Media by Demographics. Available at: http://blog.kissmetrics.com/social-media-by-demographic/?wide=1. Last accessed June 2011.

Kozinets, R. V. (1999). E-tribalized marketing?: The strategic implications of virtual communities of consumption. *European Management Journal*, *17*(3), 252-264.

Kozinets, R. V., De Valck, K., Wojnicki, A. C., & Wilner, S. J. (2010). Networked narratives: understanding word-of-mouth marketing in online communities. *Journal of Marketing*, *74*(2), 71-89.

Kramer, J., Noronha, S., & Vergo, J. (2000). A user-centered design approach to personalization. *Communications of the ACM*, *43*(8), 44-48.

Kraut, R., Mukhopadhyay, T., Szczypula, J., Kiesler, S., & Scherlis, B. (1999). Information and communication: Alternative uses of the Internet in households. *Information Systems Research*, *10*(4), 287-303.

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* (2nd) Sage Publications. Thousand Oaks, CA.

Kumar, V. (2009). Why do consumers contribute to connected goods? A dynamic game of competition and cooperation in social networks. *Social Networks*, 1-53.

Kwai Fun IP, R., & Wagner, C. (2008). Weblogging: A study of social computing and its impact on organizations. *Decision Support Systems*, *45*(2), 242-250.

Kwak, H., Lee, C., Park, H., & Moon, S. (2010, April). What is Twitter, a social network or a news media?. In *Proceedings of the 19th international conference on World wide web* (pp. 591-600). ACM.

Lam, C. K., & Tan, B. C. (2001). The internet is changing the music industry. *Communications of the ACM*, *44*(8), 62-68.

Lamb, R., & Davidson, E. (2002, January). Social scientists: Managing identity in socio-technical networks. In *System Sciences, 2002. HICSS. Proceedings of the 35th Annual Hawaii International Conference on* (pp. 1132-1141). IEEE.

Lampe, C., Ellison, N., & Steinfield, C. (2006, November). A Face (book) in the crowd: Social searching vs. social browsing. In *Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work* (pp. 167-170). ACM.

Larsen, G., Lawson, R., & Todd, S. (2009). The consumption of music as self-representation in social interaction. *Australasian Marketing Journal (AMJ)*,*17*(1), 16-26.

Larsen, T. J., Sørebø, A. M., & Sørebø, Ø. (2009). The role of task-technology fit as users' motivation to continue information system use. *Computers in Human Behavior*, *25*(3), 778-784.

Lee, A. S. (1991). Integrating positivist and interpretive approaches to organizational research. *Organization science*, *2*(4), 342-365.

Lee, A. S. (1994). Electronic mail as a medium for rich communication: An empirical investigation using hermeneutic interpretation. *MIS Quarterly*, 143-157.

Lee, A. S. (1999). Rigor and relevance in MIS research: Beyond the approach of positivism alone. *MIS Quarterly*, 29-33.

Lee, A. S. (2004). Thinking about social theory and philosophy for information systems. *Social theory and philosophy for Information Systems*, 1-26.

Lee, C. S. (2010). Managing perceived communication failures with affordances of ICTs. *Computers in Human Behavior*, *26*(4), 572-580.

Lee, J. H., & Downie, J. S. (2004, October). Survey Of Music Information Needs, Uses, And Seeking Behaviours: Preliminary Findings. In *ISMIR* (Vol. 2004, p. 5th).

Leonardi, P. M. (2011). When flexible routines meet flexible technologies: Affordance, constraint, and the imbrication of human and material agencies. *MIS Quarterly*, *35*(1), 147-167.

Lessig, L. (2004). *Free culture: How big media uses technology and the law to lock down culture and control creativity*. Penguin.

Lewis, K., Kaufman, J., Gonzalez, M., Wimmer, A., & Christakis, N. (2008). Tastes, ties, and time: A new social network dataset using Facebook. com.*Social networks*, *30*(4), 330-342.

Leyshon, A. (2001). Time-space (and digital) compression: software formats, musical networks, and the reorganisation of the music industry. *Environment and Planning A*, *33*(1), 49-78.

Liu, H. (2007). Social network profiles as taste performances. *Journal of Computer-Mediated Communication*, *13*(1), 252-275.

Liu, Y. (2006). Word of mouth for movies: Its dynamics and impact on box office revenue. *Journal of marketing*, *70*(3), 74-89.

Livingstone, S. (2008). Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression. *New media & society*, *10*(3), 393-411.

Lumpkin, G. T., & Dess, G. G. (2004). E-Business Strategies and Internet Business Models:: How the Internet Adds Value. *Organizational Dynamics*,*33*(2), 161-173.

Lyytinen, K. J., Yoo, Y., Varshney, U., Ackerman, M., Davis, G., Avital, M., & Sorensen, C. (2004). Surfing the next wave: design and implementation

challenges of ubiquitous computing. *Communications of the Association for information systems*, *13*(1), 40.

Madden, M. (2009). *The state of music online: Ten years after Napster* (pp. 1-18). Pew Internet & American Life Project.

Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university: 'It is more for socialising and talking to friends about work than for actually doing work'. *Learning, Media and Technology*, *34*(2), 141-155.

Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business horizons*, *52*(4), 357-365.

Markus, M. L., & Silver, M. S. (2008). A foundation for the study of IT effects: A new look at DeSanctis and Poole's concepts of structural features and spirit. *Journal of the Association for Information Systems*, *9*(10), 5.

Marlow, C., Naaman, M., boyd, d., & Davis, M. (2006, August). HT06, tagging paper, taxonomy, Flickr, academic article, to read. In *Proceedings of the seventeenth conference on Hypertext and hypermedia* (pp. 31-40). ACM.

Marshall, C., & Rossman, G. B. (1989). Designing qualitative research Sage. *Newbury Park, CA*.

McGrenere, J., & Ho, W. (2000, May). Affordances: Clarifying and evolving a concept. In *Graphics Interface* (Vol. 2000, pp. 179-186).

McLeod, K. (2005). MP3s Are Killing Home Taping: The Rise of Internet Distribution and Its Challenge to the Major Label Music Monopoly 1. *Popular Music and Society*, *28*(4), 521-531.

McLoughlin, C., & Lee, M. J. (2008). Future learning landscapes: Transforming pedagogy through social software. In *Innovate*.

McLoughlin, C., & Lee, M. J. (2007, December). Social software and participatory learning: Pedagogical choices with technology affordances in the Web 2.0 era. In *ICT: Providing choices for learners and learning. Proceedings ascilite Singapore 2007* (pp. 664-675).

Miles, M. B., & Huberman, A. M. (1984). Qualitative data analysis: A sourcebook of new methods. In *Qualitative data analysis: a sourcebook of new methods*. California; SAGE publications Inc.

Miles, M. B. and Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA, SAGE publications, Inc.

Miller, R., & Lammas, N. (2010). Social media and its implications for viral marketing. *Asia Pacific Public Relations Journal*, *11*(1), 1-9.

Mingers, J. (2004a). Real-izing information systems: critical realism as an underpinning philosophy for information systems. *Information and organization*,*14*(2), 87-103.

Mingers, J. (2004b). Critical realism and information systems: brief responses to Monod and Klein. *Information and organization*, *14*(2), 145-153.

Mingers, J., Mutch, A., & Willcocks, L. (2013). Critical realism in information systems research. *MIS Quarterly*, *37*(3), 795-802.

Mislove, A., Gummadi, K. P., & Druschel, P. (2006, August). Exploiting social networks for internet search. In *5th Workshop on Hot Topics in Networks (HotNets06). Citeseer* (p. 79).

Molteni, L., & Ordanini, A. (2003). Consumption patterns, digital technology and music downloading. *Long Range Planning*, *36*(4), 389-406.

Montesano, L., Lopes, M., Bernardino, A., & Santos-Victor, J. (2007, July). Affordances, development and imitation. In *Development and Learning, 2007. ICDL 2007. IEEE 6th International Conference on* (pp. 270-275). IEEE.

Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information systems research*, *2*(3), 192-222.

Morris, M., & Ogan, C. (1996). The Internet as mass medium. *Journal of Computer-Mediated Communication*, *1*(4), 0-0.

Naaman, M., Boase, J., & Lai, C. H. (2010, February). Is it really about me?: message content in social awareness streams. In *Proceedings of the 2010 ACM conference on Computer supported cooperative work* (pp. 189-192). ACM.

Nardi, B. A., Schiano, D. J., & Gumbrecht, M. (2004, November). Blogging as social activity, or, would you let 900 million people read your diary?. In *Proceedings of the 2004 ACM conference on Computer supported cooperative work* (pp. 222-231). ACM.

Nardi, B. A., Schiano, D. J., Gumbrecht, M., & Swartz, L. (2004). Why we blog.*Communications of the ACM*, *47*(12), 41-46.

Nie, N. H., Hillygus, D. S., & Erbring, L. (2002). Internet use, interpersonal relations, and sociability. *The Internet in everyday life*, 215-243.

Nasraoui, O. (2005). World wide web personalization. *Encyclopedia of Data Mining and Data Warehousing, Idea Group*.

Nie, N. H., & Erbring, L. (2000). Internet and society. *Stanford Institute for the Quantitative Study of Society*.

Nie, N. H., & Erbring, L. (2002). Internet and mass media: A preliminary report.*IT & Society*, *1*(2), 134-141.

Niehaves, B., & Bernd, C. S. (2006). Criticality, epistemology and behaviour vs. design–information systems research across different sets of paradigms.

Nielson (2009). Global Advertising Consumers Trust Real Friends and Virtual Strangers the Most. Available at:http://www.nielsen.com/us/en/insights/news/2009/global-advertising-consumers-trust-real-friends-and-virtual-strangers-the-most.html. Last Accessed 2009.

Nielson (2012). Music discovery still dominated by radio, says Nielsen Music 360 Report. Available at: http://www.nielsen.com/us/en/press-room/2012/music-discovery-still-dominated-by-radio--says-nielsen-music-360.html. Last Accessed 2012.

Norman, D. A. (1988). *The psychology of everyday things*. Basic books.

Norman, D. A. (2002). *The design of everyday things*. Basic books.

Novak, T. P., Hoffman, D. L., & Duhachek, A. (2003). The influence of goal-directed and experiential activities on online flow experiences. *Journal of consumer psychology*, *13*(1), 3-16.

OECD (2007). *Participative web and user-created content: Web 2.0 wikis and social networking*. OECD Publishing.

O'Hear, A. (1989). *Introduction to the Philosophy of Science.* Oxford University Press, New York.

Oliver, R. L. (1977). Effect of expectation and disconfirmation on postexposure product evaluations: An alternative interpretation. *Journal of applied psychology*, *62*(4), 480.

O'Reilly, T. (2007). What is Web 2.0: Design patterns and business models for the next generation of software. *Communications and Strategies*, *65*(1), 17-37.

Ong, E. Y., Ang, R. P., Ho, J., Lim, J. C., Goh, D. H., Lee, C. S., & Chua, A. Y. (2011). Narcissism, extraversion and adolescents' self-presentation on Facebook. *Personality and Individual Differences*, *50*(2), 180-185.

Orlikowski, W. J. (1996). Improvising organizational transformation over time: A situated change perspective. *Information systems research*, *7*(1), 63-92.

Orlikowski, W. J., & Iacono, C. S. (2001). Research commentary: Desperately seeking the "IT" in IT research—A call to theorizing the IT artifact. *Information systems research*, *12*(2), 121-134.

Pantzar, M. (2000). Consumption as work, play, and art: Representation of the consumer in future scenarios. *Design issues*, *16*(3), 3-18.

Parameswaran, M., & Whinston, A. B. (2007a). Research issues in social computing. *Journal of the Association for Information Systems*, *8*(6), 22.

Parameswaran, M., & Whinston, A. B. (2007b). Social computing: An overview. *Communications of the Association for Information Systems*, *19*(1), 37.

Park, J. H., Gu, B., Leung, A. C. M., & Konana, P. (2014). An investigation of information sharing and seeking behaviors in online investment communities. *Computers in Human Behavior*, *31*, 1-12.

Pascale, R., Sternin, J., & Sternin, M. (2010). The power of positive deviance. *Harvard Business School Publishing, Boston, MA*.

Pascu, C., Osimo, D., Ulbrich, M., Turlea, G., & Burgelman, J. C. (2007). The potential disruptive impact of Internet2 based technologies. *First Monday*, *12*(3).

Peitz, M., & Waelbroeck, P. (2006). Why the music industry may gain from free downloading—the role of sampling. *International Journal of Industrial Organization*, *24*(5), 907-913.

Perkowitz, M., & Etzioni, O. (2000). Towards adaptive web sites: Conceptual framework and case study. *Artificial intelligence*, *118*(1), 245-275.

Piao, S., & Whittle, J. (2011, October). A feasibility study on extracting Twitter users' interests using NLP tools for serendipitous connections. In *Privacy, security, risk and trust (passat), 2011 ieee third international conference on and 2011 ieee third international conference on social computing (socialcom)* (pp. 910-915). IEEE.

Pierce, T. (2009). Social anxiety and technology: Face-to-face communication versus technological communication among teens. *Computers in Human Behavior*, *25*(6), 1367-1372.

Popper, K. (1963). Truth, Rationality, and the Growth of Knowledge [Chapter 10]. In *Conjectures and refutations: The growth of scientific knowledge*. Broadway House, London: Routledge and Kegan Paul Limited.

Potts, J., Cunningham, S., Hartley, J., & Ormerod, P. (2008). Social network markets: a new definition of the creative industries. *Journal of cultural economics*, *32*(3), 167-185.

Potts, J. D. (2006). How creative are the super-rich?. *Agenda*, *13*(4), 339-350.

Putnam, H. (1981). *Reason, truth and history* (Vol. 3). Cambridge University Press.

Race, T. M. (2012). Resource discovery tools: Supporting serendipity. DLTS Faculty Publications. Paper 22.http://digitalcommons.wku.edu/dlts_fac_pub/22

Ramirez, Jr, A., & Burgoon, J. K. (2004). The effect of interactivity on initial interactions: the influence of information valence and modality and information richness on computer-mediated interaction. *Communication Monographs*,*71*(4), 422-447.

Ravenscroft, A. (2009). Social software, Web 2.0 and learning: status and implications of an evolving paradigm. *Journal of Computer Assisted Learning*,*25*(1), 1-5.

Regner, T., Barria, J. A., Pitt, J. V., & Neville, B. (2009). An artist life cycle model for digital media content: Strategies for the Light Web and the Dark Web. *Electronic Commerce Research and Applications*, *8*(6), 334-342.

Reinsberg, H. (2013). What Is A Subtweet. Available at: http://www.buzzfeed.com/hillaryreinsberg/what-is-a subtweet#4av2wu. Last Accessed Sep.19, 2014.

Remenyi, D., & Williams, B. (1995). Some aspects of methodology for research in information systems. *Journal of Information Technology*, *10*(3), 191-201.

Remenyi, D. (2005). Tell me a Story–A way to Knowledge. In *Proceedings of the 4th European Conference on Research Methods: In Business and Management Studies* (p. 387). Academic Conferences Limited.

Riegner, C. (2007). Word of mouth on the web: The impact of Web 2.0 on consumer purchase decisions. *Journal of Advertising Research*, *47*(4), 436.

Riva, G., & Galimberti, C. (1998). Computer-mediated communication: identity and social interaction in an electronic environment. *Genetic Social and General Psychology Monographs*, *124*(4), 434-464.

Rosen, P., & Sherman, P. (2006). Hedonic information systems: acceptance of social networking websites.

Roy, W. G., & Dowd, T. J. (2010). What is sociological about music?. *Annual Review of Sociology*, *36*, 183-203.

Rui, H., Liu, Y., & Whinston, A. B. (2010). Chatter matters: How Twitter can open the black box of online word-of-mouth. *ICIS 2010 Proceedings.* Paper 204. http://aisel.aisnet.org/icis2010_submissions/204

Rupp, P., & Estier, T. (2003, January). A model for a better understanding of the digital distribution of music in a peer-to-peer environment. In *System Sciences, 2003. Proceedings of the 36th Annual Hawaii International Conference on* (pp. 11-pp). IEEE.

Russo, A., & Peacock, D. (2009). Great expectations: Sustaining participation in social media spaces. *Museums and the Web 2009*, 60-69.

Russo, A., Watkins, J., & Groundwater-Smith, S. (2009). The impact of social media on informal learning in museums. *Educational Media International*, *46*(2), 153-166.

Rybski, D., Buldyrev, S. V., Havlin, S., Liljeros, F., & Makse, H. A. (2009). Scaling laws of human interaction activity. *Proceedings of the National Academy of Sciences*, *106*(31), 12640-12645.

Sarno, D. (2009). L.A. Times: Twitter creator Jack Dorsey illuminates the site's founding document. Available at: http://latimesblogs.latimes.com/technology/2009/02/Twitter-creator.html. Last Accessed Sep. 2014.

Sashi, C. M. (2012). Customer engagement, buyer-seller relationships, and social media. *Management decision*, *50*(2), 253-272.

Setterstrom, Andrew J. and Pearson, J. Michael (2010). Social Influence and Willingness to Pay for Online Video Games. *ICIS 2010 Proceedings.* Paper 53. http://aisel.aisnet.org/icis2010_submissions/53

Singh, S., Jackson, M., Waycott, J., & Beekhuyzen, J. (2006). Downloading vs purchase: Music industry vs consumers. In *Digital Rights Management. Technologies, Issues, Challenges and Systems* (pp. 52-65). Springer Berlin Heidelberg.

Sledgianowski, D., & Kulviwat, S. (2009). Using social network sites: the effects of playfulness, critical mass and trust in a hedonic context. *Journal of Computer Information Systems*, *49*(4).

Smith, R. E., & Swinyard, W. R. (1983). Attitude-behavior consistency: The impact of product trial versus advertising. *Journal of Marketing Research*, 257-267.

Smith, M. D., & Telang, R. (2009). Competing with free: the impact of movie broadcasts on DVD sales and internet piracy. *MIS Quarterly*, *33*(2), 321-338.

Solidoro, A. (2009, April). The evolution of the creative industries as a model of innovation. In *Proceedings of the 10th Workshop di Organizzazione Aziendale, 29th–30th April, Cagliari, Italy*.

Specht, H. (1986). Social support, social networks, social exchange, and social work practice. *The Social Service Review*, 218-240.

Statistic Brain (2014a). Facebook Statistics. Available at: http://www.statisticbrain.com/Facebook-statistics/. Last Accessed Sep. 2014.

Statistic Brain (2014b). Twitter Statistics. Available at: http://www.statisticbrain.com/Twitter-statistics/. Last Accessed Sep. 2014.

Straub, D. W., Gefen, D. and Boudreau, M.-C. (2005). Quantitative Research. In. D. Avison and J. E. Pries-Heje (Eds.) *Research in Information Systems: A Handbook for Research Supervisors and Their Students* (pp. 221-238). Amsterdam, Elsevier.

Thelwall, M. (2008). Social networks, gender, and friending: An analysis of MySpace member profiles. *Journal of the American Society for Information Science and Technology*, *59*(8), 1321-1330.

Throsby, D. (2003). Determining the value of cultural goods: How much (or how little) does contingent valuation tell us?. *Journal of cultural economics*, *27*(3-4), 275-285.

Torenvliet, G. (2003). We can't afford it!: the devaluation of a usability term. *Interactions*, *10*(4), 12-17.

Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). Effects of word-of-mouth versus traditional marketing: findings from an internet social networking site. *Journal of marketing*, *73*(5), 90-102.

Twitter (2013). Company. Available at: https://about.Twitter.com/company. Last Accessed 2013.

Van der Heijden, H. (2004). User acceptance of hedonic information systems. *MIS Quarterly*, 695-704.

Vandermerwe, S. (2000). How increasing value to customers improves business results. *Sloan Management Review*, *42*(1), 27-38.

Velasco-Martin, J. (2011, May). Self-disclosure in social media. In *CHI'11 Extended Abstracts on Human Factors in Computing Systems* (pp. 1057-1060). ACM.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 425-478.

Vyas, D., Chisalita, C. M., & Dix, A. (2008). Dynamics of affordances and implications for design. The University of Twente, The Netherlands.

Walsh, G., Mitchell, V. W., Frenzel, T., & Wiedmann, K. P. (2003). Internet-induced changes in consumer music procurement behavior: a German perspective. *Marketing Intelligence & Planning*, *21*(5), 305-317.

Walsham, G. (1993). *Interpreting information systems in organizations*. John Wiley & Sons, Inc.

Walsham, G. (1995). Interpretive case studies in IS research: nature and method. *European Journal of information systems*, *4*(2), 74-81.

Wang, H., & Wellman, B. (2010). Social connectivity in America: Changes in adult friendship network size from 2002 to 2007. *American Behavioral Scientist*,*53*(8), 1148-1169.

Wang, F. Y., Carley, K. M., Zeng, D., & Mao, W. (2007). Social computing: From social informatics to social intelligence. *Intelligent Systems, IEEE*, *22*(2), 79-83.

Waterworth, J. A. (1999). Spaces, places, landscapes and views: experiential design of shared information spaces. In *Social Navigation of Information Space*(pp. 132-154). Springer London.

Wikström, P. (2013). *The music industry: Music in the cloud*. Cambridge, England: Polity.

Wildemuth, B. M. (1993). Post-positivist research: two examples of methodological pluralism. *The Library Quarterly*, 450-468.

Williams, K., Chatterjee, S., & Rossi, M. (2008). Design of emerging digital services: a taxonomy. *European Journal of Information Systems*, *17*(5), 505-517.

Wilson, T. D. (1999). Models in information behaviour research. *Journal of documentation*, *55*(3), 249-270.

Yin, R. K. (2003). Designing case studies. *Case study research: Design and methods*, 19-56.

Yin, R. K. (1994). Discovering the future of the case study method in evaluation research. *Evaluation Practice*, *15*(3), 283-290.

Yin, R. K. (1989). Research design issues in using the case study method to study management information systems. *The information systems research challenge: Qualitative research methods*, *1*, 1-6.

Yin, R. K. (1981). The case study crisis: some answers. *Administrative science quarterly*, 58-65.

Yoo, Y., & Alavi, M. (2001). Media and group cohesion: Relative influences on social presence, task participation, and group consensus. *MIS Quarterly*, 371-390.

YouTube (2011). YouTube Statistics. Available at: http://www.YouTube.com/t/press_statistics. Last accessed June, 2011.

Zammuto, R. F., Griffith, T. L., Majchrzak, A., Dougherty, D. J., & Faraj, S. (2007). Information technology and the changing fabric of organization. *Organization Science*, *18*(5), 749-762.

Zeitlin, M. F., Ghassemi, H., Mansour, M., Levine, R. A., Dillanneva, M., Carballo, M., & Sockalingam, S. (1990). *Positive deviance in child nutrition: with emphasis on psychosocial and behavioural aspects and implications for development*. Tokyo: United Nations University.

Zhao, D., & Rosson, M. B. (2009, May). How and why people Twitter: the role that micro-blogging plays in informal communication at work. In *Proceedings of the ACM 2009 international conference on Supporting group work* (pp. 243-252). ACM.

Zhao, S. (2006). Do Internet users have more social ties? A call for differentiated analyses of Internet use. *Journal of Computer-Mediated Communication*, *11*(3), 844-862.

Zhou, Z., Jin, X. L., Vogel, D., Guo, X., & Chen, X. (2010, January). Individual motivations for using social virtual worlds: An exploratory investigation in second life. In *System Sciences (HICSS), 2010 43rd Hawaii International Conference on* (pp. 1-10). IEEE.

Appendix A METHODOLOGY

Appendix A-1 Interview Guide

Demographic Questions:

1. Age Range (record name and gender) _
2. On average how long have you been using Social Network Sites?
3. Do you use them daily/weekly/monthly?
4. What devices do you use to access your social network sites (mobile/laptop/PC)?
5. Are you confident undertaking tasks on a computer?

Firstly, I am going to ask you questions about general music seeking activities, not specific to any particular technology or medium. Then later we will delve into your specific use of [Facebook/Twitter] for undertaking music seeking activities.

MUSIC CONSUMPTION INTENSITY		
Main Question	**Additional Question**	**Clarifying Q.**
– Is music important to you?	– What type of music do you prefer? – Why do you prefer this music?	– Can you expand a little on this? – Can you tell me anything else? – Can you give me some examples?
– On average, how long do you spend on music activities?	– Name a typical way that you would find or discover music using different mediums? – Why do you prefer to find music this way?	
– Do you use a combination of methods to find music?	– Can you describe this process? – Do you explore different ways of finding music or do you have a specific routine?	
SNS USE INTENSITY		
Main Question	**Additional Question**	**Clarifying Q.**
– Which social network sites do you use?	– Why do you use them?	– Can you expand a little on this? – Can you tell me anything else? – Can you give me some examples?
– How long do you spend per day on [Facebook/Twitter]?	– Is this a part of your daily routine?	
– About how many total friends/followers do you have on the SNS?	– Do you actively partake in the online community by contributing information and/or content? (if yes, could you give an example – if no, why not?) – Do you use [Facebook/Twitter] to communicate with friends or connections?	

INFORMATION SEEKING		
Main Question	**Additional Question**	**Clarifying Q.**
– Can you describe a time when you have searched for music or music information in [Facebook/Twitter]?	– What features helped you in this task? – Is this an effective way for you to find specific music? – Can you describe another instance?	– Can you expand a little on this? – Can you tell me anything else? – Can you give me some examples?
– When seeking music or information what sources do you use in [Facebook/Twitter]?	– Why do you use these sources?	
INFORMATION ENCOUNTERING		
Main Question	**Additional Question**	**Clarifying Q.**
– Can you describe a time when you have discovered new music or music information in [Facebook/Twitter]	– What features were involved in this task? – Is this an effective way of discovering music for you? – Can you describe another instance?	– Can you expand a little on this? – Can you tell me anything else? – Can you give me some examples?
– When encountering music what sources have best aided you?	– How have these sources been helpful?	
INFORMATION SHARING		
Main Question	**Additional Question**	**Clarifying Q.**
– Can you describe a time when you have used [Facebook/Twitter] to interact and share music or music information with others?	– What features do you employ for this?	– Can you expand a little on this? – Can you tell me anything else? – Can you give me some examples?
– Is it important for you to share your opinions and tastes with others?	– What ways do you employ to do this? – Why do you do this? – Do you feel a responsibility to share with friends who regularly share music and opinions with you?	
– Are the people that you know (friends/family), or are connected with, important sources of music for you?	– How do they communicate with you about music? – Are the opinions or recommendations of others important to you when evaluating music?	
COMBINED SNS USE		
Main Question	**Additional Question**	**Clarifying Q.**
– Do you use a combination of social network sites for consuming music? If no, why not?	– What sites do you use? – What do you use each of them for? – What are the strengths and weaknesses of each in this context? – How do they complement each other for music seeking activities?	– Can you expand a little on this? – Can you tell me anything else? – Can you give me some examples?

Concluding the Interview:

- Is there anything more you would like to add?
- Thank you for your time.

Appendix A-2 Phase Two Data Analysis

INITIAL DATA CODING OF INTERVIEW TRANSCRIPTS	
Category	**Code**
SETTING	
Case Site	FACEBOOK
	TWITTER
Case Group	FACEBOOK-GENERAL-PLUGD
	FACEBOOK-MUSICIAN-BJORK
	TWITTER-GENERAL-GUARDIAN
	TWITTER-MUSICIAN-PALMER
USER	
Demographics	AGE
	GENDER
	FORMAT OF INTERVIEW
	LOCATION
	SNS USE YEARS
	FREQUENCY
	DEVICES
	COMPUTER SELF-EFFICACY
MUSIC STRATEGY	
General	GENERAL-STRATEGY
	MUSIC SHARING
	SHARED TASTES
Music Sources	SOURCES-FRIENDS
	SOURCES-NEWSMAGS
	SOURCES-BLOGS
	SOURCES-MUSIC RELATED PROFILES
	SOURCES-MUSICIANS
MUSIC CONSUMPTION INTENSITY	
Music Characteristics	MUSIC IMPORTANCE
	MUSIC TYPE
	MUSIC LINK
Music Intensity	MUSIC INTENSITY-DAILY
	MUSIC INTENSITY-WEEKLY
	MUSIC INTENSITY-HOURS
	MUSIC INTENSITY-PASSIVE
	MUSIC INTENSITY-ACTIVE
	MUSIC INTENSITY-ACTIVELY BROWSE
	MUSIC INTENSITY-ACTIVELY SEEKS
	MUSIC INTENSITY-HIGH RECEPTIVE
	MUSIC INTENSITY-LOW RECEPTIVE
	MUSIC INTENSITY-HIGH EXPLORATIVE
	MUSIC INTENSITY-LOW EXPLORATIVE
	MUSIC INTENSITY-HIGH CONTRIBUTION
	MUSIC INTENSITY-LOW CONTRIBUTION
SNS USE INTENSITY	
General Characteristics	SNS USED-QUANTITY
	SNS SITES USED-TYPE
	SNS TOTAL CONNECTIONS
Activity Level	SNS ACTIVITY LEVEL-DAILY
	SNS ACTIVITY LEVEL-WEEKLY
	SNS ACTIVITY LEVEL-HOURS
	SNS ACTIVITY LEVEL-HIGH CONTRIBUTION

	SNS ACTIVITY LEVEL-LOW CONTRIBUTION
	SNS ACTIVITY LEVEL-HIGH PARTICIPATION
	SNS ACTIVITY LEVEL-LOW PARTICIPATION
ACTIVITIES	
Information Seeking	INFORMATION SEEKING-SEARCHING
	INFORMATION SEEKING-EXPLORING
	INFORMATION SEEKING-SPECIFIC EVENT
	INFORMATION SEEKING-EFFECTIVE FOR NEEDS
	INFORMATION SEEKING-SOURCES
	INFORMATION SEEKING-MOTIVATION
Information Encountering	INFORMATION ENCOUNTERING-DISCOVERING
	INFORMATION ENCOUNTERING-SAMPLING
	INFORMATION ENCOUNTERING-SPECIFIC EVENT
	INFORMATION ENCOUNTERING-EFFECTIVE FOR NEEDS
	INFORMATION ENCOUNTERING-SOURCES
	INFORMATION ENCOUNTERING-MOTIVATION
Information Sharing	INFORMATION SHARING-INTERACTING
	INFORMATION SHARING-SHARING
	INFORMATION SHARING-SPECIFIC EVENT
	INFORMATION SHARING-SOURCES
	INFORMATION SHARING-TASTES
	INFORMATION SHARING-MOTIVATION
SOCIAL AFFORDANCES	
Profile Building	PB-MANAGE PROFILE
	PB-PROFILE UPDATES
	PB-LOCATION TAGGING
	PB-EXTERNAL
	PB-MOBILE
Social Connectivity	SC-CONNECTING ADD
	SC-CONNECTION SEARCH
	SC-CONNECTION GROUPS
Social Interactivity	SI-ASYNCHRONOUS COMM
	SI-SYNCHRONOUS COMM
	SI-LIKING
	SI-EXTERNAL INTERACTIONS
CONTENT AFFORDANCES	
Content Discovery	CD-INTERACTION
	CD-CONTENT SEARCH
	CD-TIMELINE
	CD-EXTERNAL SOURCES
Content Sharing	CS-INTERACTIONS
	CS-EXTERNAL SOURCES
Content Aggregation	CA-INTERNAL
	CA-EXTERNAL

Table A-2.1: Initial Data Coding of Interview Transcripts

Appendix B PHASE ONE SYSTEM INVENTORY FINDINGS

Appendix B-1 System Inventory Feature Analysis

Table B-1.1: FACEBOOK FEATURE ANALYSIS							
Feature	**Description**	**SC**	**SI**	**PB**	**CD**	**CS**	**CA**
Activities and interests	Edit activities and interests on your profile page. Tags keywords.			**x**			
Applications	Apps on Facebook are designed to enhance a user's experience on the site with engaging games and useful features like Events and Photos. Some apps are built by Facebook developers, but most are built by outside developers. Apps on Facebook allow a user to play social games with friends, remember friends' birthdays, share tastes in movies/music/books, send gifts *etc*.	**x**	**x**	**x**	**x**	**x**	**x**
Birthdays	Edit birthday details and view friend's birthdays.			**x**			
Chat	Send instant messages to friends.		**x**				
Comments	Enable users to write a comment under posts.		**x**			**x**	
Community pages	Community pages are built around topics, causes or experiences. Many community pages display Wikipedia articles about the topics they represent, as well as related posts from other people on Facebook in real time. These pages are linked with fields a user fills out in their profile (timeline). They include general topics and all kinds of unofficial but interesting things. A user "like's" these pages to connect with them, but they aren't run by a single author, and they don't generate News Feed stories.	**x**		**x**	**x**	**x**	**x**
Connection search	The Connection Search feature helps a user make real-life connections. Based on education, work, and other related information, Facebook provides search results of people who might be of interest to a user for a job search or work life	**x**			**x**		
Profile information	Editing basic profile information including location, gender, birthday, interested in, languages, about me. Other information: profile picture, friends and family, education and work, philosophy, arts and entertainment, sport, activities and interests, and contact information. Tags content and links to other pages.			**x**			
Events	For organising gatherings, responding to invites, and keeping up with what a user's friends are doing.		**x**				
Facebook mobile texts	Receive and respond to notifications through text messages on your phone.			**x**			
Friend finder	Find friends using contacts from an email service provider	**x**					
Friend lists	Lists are an optional way to organise friends on Facebook so a user can filter the stories they see in News Feed or post an update for specific people from one part of life.	**x**		**x**			**x**
Friends	Add friends – people in your life to connect and share with	**x**					**x**
Friends box	Displays connections, mutual friends and shared interests/			**x**	**x**		
Friendship pages	Friendship pages make it easier to view all of the content related to a specific friendship and help friends focus on their common histories. Friendship pages create a visual list of Wall (timeline) posts exchanged, mutual friends, events both people attended, photos both people are tagged in, and things both people "like."						**x**
Group chat	Send an instant message to multiple friends.		**x**				

FACEBOOK FEATURE ANALYSIS							
Feature	**Description**	**SC**	**SI**	**PB**	**CD**	**CS**	**CA**
Group docs	Docs allow people to collaboratively write and edit content. Similar to a wiki, they can be viewed and edited by all members of a group, and any group member may add or remove sections of the doc.		x			x	x
Group events	Add an event for a specific group.		x				
Group photos	Share/access a photo album with a group					x	
Groups	Groups provide a closed space for small groups of people to communicate about shared interests. Groups can be created by anyone.	x	x		x	x	
Homepage	Homepage displays the news feed, messages, events, find friends, lists,			x			
Instant personalisation	To enable an individual to view content that's tailored to them and their friends around the web. Facebook has partnered with a few select websites to make them more useful by letting people bring friends and interests with them when they visit.			x			
Like	"Like" is a way to give positive feedback or to connect with things you care about on Facebook. A user can like content that friends post, to give them feedback or like a Page that they want to connect with on Facebook. A user can also connect to content and Pages through social plugins or advertisements on and off Facebook.	x	x	x		x	x
Linking to Twitter	Linking Facebook posts to automatically post as tweets on Twitter - based on predefined settings			x			
Links (internal/external)	Share a link from the web on Facebook. Add a web address to external content. Post a link while on another website, like/recommend/post content to a profile.		x	x	x	x	x
Login with Facebook (external website)	Use a Facebook account to sign into other sites and see what friends are doing across the web.			x			
Messages feature	Enables the exchange of private messages, emails and mobile texts with friends. Messages are grouped into one ongoing conversation with each friend or group of friends, not by date or subject line. Smart filtering enables a user to see messages from friends, and friends of friends, first.		x				
Mobile Facebook	Enables users to update statuses, browse the News Feed, and view friends' profiles (timelines) all from a mobile phone.			x			
Network	A network is a community based on specific criteria; networks include college networks, high school networks, and work networks. A user can join multiple networks, but can only choose one network to be the primary network. A primary network is whichever network a user feels most connected with.	x					
News feed	News Feed is the center column of a user's home page. It is a constantly updating list of stories from People and Pages that a user follows on Facebook. Top News, Most Recent, Filter News Feed [Status updates/photos/ links/pages/questions]			x	x	x	x
Notes	Enables users to publish in a rich format, or import their external blog posts.		x	x	x	x	x
Notifications	Facebook sends quick updates about friends' actions.			x			
Pages	Pages allow real organisations, businesses, celebrities and brands to communicate broadly with people who like them. Pages may only be created and managed by official representatives. Similar to profiles (timelines), Pages can be enhanced with applications that help the entity communicate and engage with their audiences, and capture new audiences virally through friend recommendations, News Feed stories, Facebook events, *etc*. Liking pages creates a profile link.	x	x	x	x	x	x

FACEBOOK FEATURE ANALYSIS							
Feature	**Description**	**SC**	**SI**	**PB**	**CD**	**CS**	**CA**
People you may know	People You May Know helps a user find people they are likely to know. Facebook shows people based on mutual friends, work and education information, a user's networks, imported contacts using friend finder and many other factors.	x					
Photos	Share photos/albums within a network.					x	x
Places	Places are pages that represent locations on Facebook. A user can check into places visited using a mobile phone. A user can tag friends who are with them, and view comments friends have made about places visited.		x	x		x	x
Pokes	When a user poke's someone, they'll receive a poke alert on their home page. For instance, a user can poke friends to say hello.		x				
Posts/status updates	Enables users to post content to their wall or others walls, includes status updates, links, photos, videos, place tags, people tags and intended audience. Status updates appear in a networks' News Feed depending on privacy options. A user can post to a broad audience, to a small group of people, or to an individual.		x	x	x	x	x
Profile picture	A picture of a unique user profile.			x			
Questions	Facebook Questions lets a user ask any question and get quick answers from their friends and other people on Facebook. Questions is designed so that anyone on Facebook can help find the answer. So when a question sis asked, it is shared in the News Feed. If friends answer or follow that question, it will be shared with their friends and so on.		x				x
Related posts	The Related Posts section displays a stream of public posts in which people on Facebook have mentioned the community page's topic.				x		x
Search filters	Filtered searches: people, pages, groups, applications, events, web results, posts by friends, posts by everyone.				x		x
Search on Bing	Web search powered by Bing, on Facebook or signed into Facebook through Bing.com. People searches are personalised.				x		
Share posts	Share friend's posts and tag people in posts to share with a broad audience or selected people			x	x		
Social plugins	Social plugins are tools that other websites can use to provide people with personalised and social experiences: you share your experiences off Facebook with your friends on Facebook.			x			
Social plugins: Activity Feed	A social plugin of what your friends are liking, commenting on or sharing on a site.			x	x		x
Social plugins: Comments box	Publicly comment on another website using your Facebook account.			x			
Social plugins: Like button	Click Like to publicly share and connect with content from other websites that you find interesting.			x			x
Social plugins: Recommendations	Most liked content among your friends on a site.			x	x		
Social plugins: Send button	Click Send to share a link and optional note as a private Facebook message, Facebook Group post, or email.			x		x	
Tagging	A tag links a person, page, or place to something a user posts, like a status update or a photo. For example, a user can tag a photo to say who's in the photo or post a status update and say who they are with. Tagging people, pages and places in posts lets others know more about who the user is with, what's on their mind and where they are.			x		x	x
Username	A username/nickname for a profile.			x			

Video	Upload and edit videos to Facebook.		x			x	x
Video calling	Video calling allows you to talk to your friends face to face through the use of microphones and/or webcams		x				
Video message	Upload and edit video message to someone.		x				
Wall	A collection of posts on a user's profile, whether user's status updates or posts by friends.				x		x

Table B-1.2: YOUTUBE FEATURE ANALYSIS							
Feature	**Description**	**SC**	**SI**	**PB**	**CD**	**CS**	**CA**
Annotations	Link to other content within a video.				x	x	x
Auto-share	Automatically share favourite YouTube videos and YouTube activity with friends on other social networks. Link YouTube accounts with Twitter, Facebook, MySpace, Orkut and Google Reader accounts and choose which YouTube activities to share with friends.		x	x		x	
Browse	Browse for content with top viewed videos and categories.				x		x
Build queue	Build queues of videos to watch.						x
Bulletin Posts	A bulletin is an update sent from a user's channel page to their subscribers. Used to update subscribers about a video-in-progress, a link to a favorite video, *etc.* When a bulletin is posted, it will appear: • on subscribers' recent-activity feeds • on subscribers' recent-activity module (on the homepage) • on the user's channel page in recent-activity module • through an email digest where subscribers can choose to opt in (optional)		x		x	x	
Channel Comment	Users can comment directly on a user's channel.		x				
Channels	Personal channel page.			x			
Charts	List of top videos.				x		x
Citizen Tube	Blog about important breaking news videos from citizens – trends.				x		x
Comment	Enables users to respond to videos by adding a comment beneath the player. Comments can also be rated by users based on their quality - by clicking "Vote Up" or "Vote Down". The highest voted comments earn the top spot, directly beneath the player.		x				
Create a Playlist	Create a playlist of videos.						x
Creator's Corner: YouTube Blog	YouTube blog with all posts tagged with creators corner.				x		
Creators' Corner Blog	Blog for creators, devoted to videographers and making videos on YouTube.				x		
Description	Describe the content on the video.					x	
Email Notifications	Content Manager sends several types of notifications: report notifications**,** dispute notifications**,** secondary notifications, search notifications, and upload notifications.			x			
Embed Content	Embed content into other websites.			x		x	
Favourite	Enables users to add videos to favourites. This will bookmark that video in the user's account, to facilitate returning to it easily for repeat viewing.		x			x	x
Friends	Users can connect with Friends.	x					
Homepage	Once signed in a user's YouTube homepage displays all subscribed channel acitivty and reccomendations based on browsing history.			x			x
Insight	Manage channel statistics.			x			

YOUTUBE FEATURE ANALYSIS							
Feature	**Description**	**SC**	**SI**	**PB**	**CD**	**CS**	**CA**
Like/Dislike	Users can vote like or dislike under a video to let others know. Videos display total likes and dislikes.		**x**				**x**
Live-Streaming	Broadcast content in real time to the YouTube community directly from the YouTube channel page.					**x**	
Manage your subscriptions	Change notification preferences on subscribed channels and manage and view all subscriptions under the YouTube Account tab.			**x**			
Mobile Application	Watch YouTube content on the go with the mobile phone application using Internet access.			**x**			
On-site messaging system	Send a direct message to another YouTube user.		**x**				
Private sharing and unlisted videos	Manage privacy on videos.			**x**			
Promoted videos	Display promoted videos next to other search results.				**x**		
Recommended for you	Recommendations based on browsing history (channels or videos).	**x**			**x**		**x**
Rent a film	Rent content on YouTube.				**x**		
Search	Search YouTube for content. Filtered based on: result type (video, channel, and playlist), relevance, upload date, category, duration, and feature.	**x**			**x**		
Share/embed	Enables users to share a YouTube video with friends via email, social networks or blogs directly from the video page. Just click the Share button underneath the video.		**x**	**x**		**x**	
Subscribe/Subscriptions	Allows a person to subscribe to another user's YouTube channel. The channel's latest videos and recent shared activity is delivered automatically to a user's homepage.	**x**			**x**		**x**
Suggested Videos	List of related videos displayed next to current video.				**x**		**x**
Topics	List of videos related to a particular topic.				**x**		**x**
Trending Terms	Popular keywords grouped.				**x**		**x**
Video Editor	Upload video manager.					**x**	
YouTube Direct	Embed an uploader directly into your own site.			**x**			
YouTube Facebook	Follow YouTube updates via Facebook.			**x**	**x**		**x**
YouTube Twitter	Tweets on YouTube news, trends, and videos.			**x**	**x**		**x**

Table B-1.3: TWITTER FEATURE ANALYSIS							
Feature	**Description**	**SC**	**SI**	**PB**	**CD**	**CS**	**CA**
#Hashtags	People use the hashtag symbol # before relevant keywords in their Tweet to categorise those Tweets to show more easily in Twitter Search. Clicking on a hashtagged word in any message shows you all other Tweets in that category. Hashtagged words that become very popular are often Trending Topics.				**x**	**x**	**x**
@Anywhere	@Anywhere is a collection of free, simple web tools and APIs that enable partner websites to easily integrate Twitter functionality into their site experience. Twitter users will be able to engage with existing Twitter features from anywhere on the web.			**x**			
@Mention/@Reply	The @ sign is used to call out usernames in Tweets. When a username is preceded by the @ sign, it becomes a link to a Twitter profile. @Reply is used as a form of reply to a specific user by mentioning there name in a tweet.		**x**		**x**	**x**	**x**

TWITTER FEATURE ANALYSIS							
Feature	**Description**	**SC**	**SI**	**PB**	**CD**	**CS**	**CA**
@Twittersuggests	@Twittersuggests is a feature which looks like a Twitter account – it algorithmically generates suggestions of users to follow and sends them to a user. @Twittersuggests will tweet recommendations to users via @mentions, and these Tweets will appear in the @mentions timeline.				**x**		
Automated Tweets	Automating tweets based on a set of criteria. Whether it automates all tweets based on what posts from other websites/social media sites or automated @replies, mentions, DMs, and retweets. Tweet can also be automated to trending topics.		**x**		**x**	**x**	**x**
Avatar	The personal image uploaded to a Twitter profile in the Settings tab of an account.			**x**			
Bio	A short personal description used to define who you are on Twitter.			**x**			
Blocking	To block someone on Twitter means they will be unable to follow you or add you to their lists, and their mentions will not be delivered to the mentions tab.			**x**			
Buttons [Tweet/Follow]	Twitter buttons are available in the Resources tab of an account, and are used to link to Twitter from other webpages. Included buttons are: Tweet and Follow			**x**			
Connections (applications)	The Twitter ecosystem contains thousands of third-party applications. Connecting to these applications allows a user to customise their Twitter experience. For example, a user can automatically share Tweets on Facebook or instantaneously tweet whenever a blog is updated.			**x**			
Design	Choose a design for the profile page			**x**			
Direct Message	These Tweets are private between only the sender and recipient. Tweets become DMs when they begin with "d username" to specify who the message is for.		**x**				
Email Notifications	Preferences set by Twitter users to regulate notifications via email about events on their account, such as new followers and new direct messages.			**x**			
Facebook Application	Allows users to share recent Twitter updates with Facebook friends. Connects Facebook and Twitter accounts so an individual's Tweets post to their Facebook profile via the application.		**x**	**x**		**x**	
Favorite	To favorite a Tweet marks it as a favorite and aggregates it into a list on the profile page. It is done by clicking the yellow star next to the message or via SMS.		**x**				**x**
Find People (who to follow)	Twitter's search feature used to locate friends on the site. Also known as "Who to Follow" – includes "View Suggestions", Twitter suggests users based on following history and other criteria; "Browse Interests", users select topics of interests for suggestions; and "Find Friends", find friends via external services.	**x**					**x**
Follow	Enables a user to follow someone and subscribe to their Tweets or updates on the site.	**x**					
Follow Friday	Twitter users often suggest who others should follow on Fridays by tweeting with the hashtag #FF	**x**			**x**	**x**	
Geotagging/ geolocation	Geotagging allows a user to selectively add location information to their Tweets. The use of location data in Tweets displays where a user is in real time. It is also called "Tweet With Your Location.			**x**			
Handle/Username	A user's "Twitter handle" is the username they have selected and the accompanying URL			**x**			
Home Timeline	A timeline is a Twitter term used to describe a collected stream of Tweets listed in real-time order.				**x**		**x**

TWITTER FEATURE ANALYSIS							
Feature	**Description**	**SC**	**SI**	**PB**	**CD**	**CS**	**CA**
Hovercards	Floating messages about other Twitter users. They appear when hovering over a username on Twitter, or on other sites on the web.						
Lists	Curated groups of other users. Used to tie specific individuals into a group on a Twitter account.	**x**			**x**		**x**
Mobile: Short Code	A five-digit phone number used to send and receive Tweets via text message.			**x**			
Mobile: Sleep Time	Sleep time allows a user to schedule an OFF and ON time for Twitter updates going to a phone.			**x**			
Mobile: Twitter	mobile.Twitter.com is a web app that allows for a consistent, high-quality experience on any device.			**x**			
OH/Overheard	"OH" most often means "Overheard" in Tweets. Used as a way to quote funny things people overhear.					**x**	
Profile	A page displaying information about a user, as well as all the Tweets they have posted.			**x**			
Profile Picture	Picture posted to a user's profile.			**x**			
Promoted Tweets	Tweets that selected businesses have paid to promote at the top of search results on Twitter.				**x**	**x**	
Real Name	Real name for a Twitter profile.			**x**			
Retweet	The act of forwarding another user's Tweet to all of your followers. Often used to spread news or share valuable findings on Twitter. RT is placed before the retweeted text when users manually retweet a message.		**x**		**x**	**x**	**x**
RSS Feed	Most commonly expanded as Really Simple Syndication. A family of web feed formats used to publish frequently updated works—such as blog entries or news headlines—in a standardised format.			**x**	**x**	**x**	**x**
Saved Searches	The ability to save a search to your profile and revisit the search and get the latest for results for that query.				**x**		**x**
Searches	A box on the homepage that allows a user to search public Tweets for keywords, usernames, hashtags.				**x**		
Third Party Applications	A third-party application is a product created by a company other than Twitter and used to access Tweets and other Twitter data.			**x**			
Timeline	A timeline is a Twitter term used to describe a collected stream of Tweets listed in real-time order. Timelines can also consist of collected messages from users in curated lists or as results of searches. When you click on a list, you will see an aggregated stream of Tweets (a timeline) posted by the users included in that list. Similarly, when you perform a search, you'll see a timeline of messages that all match your search terms.				**x**		**x**
Top Tweets	Tweets determined by a Twitter algorithm to be the most popular or resonant on Twitter at a given time.				**x**		**x**
Trending Topic	A subject algorithmically determined to be the most popular on Twitter at the moment.				**x**		**x**
Tweet	A message posted via Twitter containing 140 characters or fewer.		**x**			**x**	
Widgets	A bit of code that can be placed anywhere on the web. Updates regularly with one's Twitter updates in real time.			**x**			
Widget: Faves	Faves Widgets will show all the Tweets a user has marked as Favorite			**x**			**x**
Widget: List	List Widgets show off a list of users you've curated. Great for showing off a subset of interesting folks' Tweets.			**x**			**x**
Widget: Profile	Profile Widgets display recent tweets from a user.			**x**			**x**
Widget: Search	Search Widgets display highly customisable search results in real time (perfect for live events, conferences, brands *etc.*			**x**			**x**

Appendix C PHASE TWO INTERVIEW FINDINGS

Appendix C-1 Chains of Evidence: Active Seeking Constraints

Table C-1.1: TWITTER ACTIVE SEEKING CONSTRAINTS	
Lack of active seeking – passive encountering preferred	**General music seeking difficult – directed search promoted**
AP4: *I just follow links of other peoples tweets, I haven't used any hash tags or anything to find music.* **AP5:** *Not really, I am sort of new to Twitter, I have kind of always been on it but I have never really spent a lot of time on it. I haven't really done any surfing for music on Twitter but anytime, like as I said that someone mentions something music wise I usually will check it out based on their tweets.* **GM2:** *I wouldn't really go searching on Twitter, just for 'I need to find new music.' I don't know would I go onto Twitter. I would just click on some people I follow are saying 'got to listen to this!' If I actually, in general, if I see any status saying 'you have to listen to this!' no matter who it is I will probably listen to it like.* **GM3:** *Not searching, Twitter searching is kind of quite rag tag anyway, it's not the greatest search engine or anything. It's more for passive acquisition I suppose might be the word; it's just I like to see what people are talking about rather than searching actively on it.* **GM4:** *I don't' really search for it. It just comes up because I follow people that… and actually I have got a lot of music blogs I follow on Twitter as well so, I don't go in there and use the search function, it's more like a stream that is coming through and I am just picking up on things that come through on my timeline.*	**GM6:** *I think the thing about it you do have to be kind of quite smart about the way you use it. I mean I think one of the disadvantages of social media as a source for that is it's kind of the other side of the coin to getting rid of the A&R man sitting on the shoulder is that kind of level of quality filtering has disappeared and so like I say even if you did just put in avant-garde you would just get so many tweets and so much irrelevancy that you kind of I think you need to know almost what you are looking for before you go in there and hence that is why I kind of tend to rely more on recommendations from other people in the first instance and why you know I might pick up a band from a random Last.fm playlist that has come up that has interested me and I will look for them to see if they have a Twitter account and then follow them. So yeah, the downside to that is that you find yourself falling into the filter bubble trap, you know where you get quite focused because you are just drawing from people with similar tastes.*

Table C-1.2: FACEBOOK ACTIVE SEEKING CONTRAINTS		
Lack of active seeking – passive encountering preferred	**General music seeking difficult – directed search promoted**	**Search difficult – too many search results**
BK6: *I would never really, I wouldn't be searching for music on Facebook I would say. Like I would like artists and things like that and if they put up a video I'd always see that first or maybe. If I like music blogs on Facebook say, Nialler9 would be the big one that I'd always check.* **BK6:** *If he put up a video maybe and I remember that was good then I'd go to his Facebook page and look for it but I wouldn't actively go searching on Facebook for music because I don't think it's*	**BK1:** *It's easier to find about a band on a newspaper music site or a blog rather than on Facebook, I suppose you couldn't actively search on Facebook for music just randomly looking for bands, so you need to find it on a different site and when you know the band's name and you like them then you can go onto Facebook. That's what Facebook is good for. It is not good really for searching for bands like say YouTube would be, but when you know the band and you like them then you can actually follow them and look at their activity*	**BK4:** *It can hinder you as well though because you can – in the search engine – if you are trying to find a band or find a website it can be so hard to find a specific one because you're not just confined to Ireland you're confined to the whole world so it can be really hard – what was I trying to look for recently? – Some band names can be so hard to search for there is a band from Dublin I think called Bats, you can imagine how hard it is but then once you Google Bats and*

the best place to look. **PR1:** *No I wouldn't associate Facebook with a purposeful search for new music.* **PR2:** *I can't say Facebook itself is amazing for going finding directly the music that you want, like I say I use Google for that but stumbling upon new music it is great.* **PR6:** *A good example would probably be, there is, I don't know if you know them the boiler room? It's a kind of a live feed of DJs playing music, so they broadcast from different places all over the world. I think it is a daily thing, but I was trying to find this specific song that a specific DJ played, I haven't found it yet, but I will. I've contacted a guy, so I suppose that's probably one step I have taken to find out a specific song that that DJ was playing at a certain time, so I'm trying to track that down. I suppose it is hard to pinpoint when I have gone looking for something specifically on Facebook like I have gotten introduced to things through Facebook but I wouldn't necessarily go to Facebook looking for something, if you know what I mean.*	*on Facebook. It's good for band activity rather than finding a band.* **BK2:** *Well I am trying to think is there is any other way of to actually look for music, no I guess just through the band page I mean there is no other way. Normally if I go in and you can type in anything within Facebook's search engine it will come up if you put in the music. I wouldn't type in jazz music and see what Facebook throws at me. I wouldn't do that within Facebook because then I'd feel like you are limited to whatever groups are within Facebook but I would put in a specific band to see if they have a page. Yeah I think that is the only I would search for music.* **PR5:** *But not for very specific things. Sometimes I would have a specific taste at the moment I am listening to a lot of stuff that has heavy kicks and high hats, yeah and you can't really find that on…you know you have to go onto Discogs and you have got to trawl through like different things and find different artists and even YouTube is good for that with recommendations I mean it depends. When I get stuck looking for stuff Facebook is probably good. But if I am on a buzz or whatever then it is not the best.*	*Facebook you come to it straight away but if you search within Facebook you can't find it!* **PR1:** *I don't actually follow any band pages. Which is surprising, but I don't think I'm on Facebook enough to do that. It's just something I've never utilised on Facebook and I should because they obviously are informative. I guess you could categorise Facebook, into kind of friends and then bands. So that way...because right now in Facebook if you search someone's name you're just going to get a thousand people with the same name, and then there is going to be bands thrown in there, and there's going to be news sites thrown in there, and there's going to be clubs and events thrown in there. There's no way to really refine what you're looking for. So that's something that just puts me off. That's why I'm a very poor social stalker, I guess is the word for it, it's just too much effort.* **PR2:** *Surprisingly their search engine is crap, if you type in a band, and they don't have million followers they mightn't appear, so I, oddly enough to search in Facebook I go to Google, and I put in the band's name and Facebook and it pops up more often than not. It's mad like, it doesn't make sense why it's not better but that would be it. And it all kind of follows on from there you see bands and music more and more where if you are on mailing lists and just going to the website you have Facebook, Twitter, SoundCloud, Bandcamp, like they are becoming part of the norm, like you will have official websites and then all of those so. But searching you just kind of goes through Google.*

Appendix C-2 Chains of Evidence: Affordance A

Table C-2.1: CHAINS OF EVIDENCE FOR AFFORDANCE A	
Twitter	**Facebook**
Learning about artists for music content and updates (generally new artists)	
AP1: *There have been many times where someone will suggest an artist to me and I'll go look them up on Twitter and start following them. Usually this is the first step I take to learn more about that individual or band.*	**BK1:** *It's easier to find about a band on a newspaper music site or a blog rather than on Facebook, I suppose you couldn't actively search on Facebook for music just randomly looking for bands, so you*

GM1: *I found a lot of bands that I have become a fan of and got into researching them from Twitter because a lot of the people I follow would be musicians and you find that they post about other musicians or news or new bands. So you discover them on Twitter, you follow the band on Twitter, you realise they are interesting to you and then they post on Twitter; when their gigs are, when their albums are coming out, about their production or what they are doing, so you kind of start building up there with them.* **GM2:** *I'd look them up on Twitter, follow them on Twitter, go onto their website, listen to…if they are a new artist they probably only play one song, maybe two, so I will listen through their stuff.* **GM6:** *I kind of tend to rely more on recommendations from other people in the first instance and why you know I might pick up a band from a random Last.fm playlist that has come up that has interested me and I will look for them to see if they have a Twitter account and then follow them*	*need to find it on a different site and when you know the band's name and you like them then you can go onto Facebook. That's what Facebook is good for. It is not good really for searching for bands like say YouTube would be, but when you know the band and you like them then you can actually follow them and look at their activity on Facebook. It's good for band activity rather than finding a band.* **BK1:** *If you like their page you get information on tour dates, when they post a comment you can actually comment back with them and some bands particularly a lot of the major label bands will comment back, like your comment and stuff like that. They'll also post other bands that they like and you can interact by liking that, and just tour dates and album notices as well.* **BK2:** *When I hear bands, I will go and search for their band page and go and like it so that then if they have a gig coming up or if they are posting up videos then that will come up in my newsfeed. So I have done that quite a bit.*
Following artists for music content and updates (generally known artists)	
AP4: *Just looking for musicians or bands that I like, and just following them or seeing if they have anything worth seeing on Twitter. Specifically, there is a guy called "Rob the Anonymous" who was the singer of the band called "The Dead Mountain" out of Philadelphia, I actually read a blog post, on a site that said he was on Twitter and I specifically went there to find him on Twitter.* **GM4:** *I follow probably ten music blogs, a bunch of record labels, a bunch of producers …DJs are always putting tracks out, there's constantly interesting stuff popping up.*	**BK3:** *I have obviously liked a number of bands, so their stuff would come onto my homepage, on my Facebook from time to time.* **BK4:** *Primarily, the only way I would do that is if I was…I would type into the search engine and try to find a website that had a Facebook page or a band that had a Facebook page and that would be the only time I think. That would be it definitely. Generally the reason I do that is to see if they are gigging in Cork if they are coming to Cork, yeah generally if I try to find a band, if I photograph them I will try to find their Facebook page and like them and then contact them and stuff. That would really be the only way. Although then just scrolling down my newsfeed and then you know just seeing all the things that pop up.* **BK6:** *I would like artists and things like that and if they put up a video I'd always see that first or maybe.* **PR4:** *I would only look deliberately via Facebook for clarifications of gig dates and stuff like that … and to like band pages, so to keep up-to-date with their activities as opposed to their music because I have generally already heard of them by the time – audio heard them – by the time I get to their Facebook page.* **PR6:** *I probably discover more music on Facebook than I did a couple of years ago. [Because you are more active?] Yeah. I suppose yeah, I have discovered that aspect of it, that there were so many DJs using it that there were so many producers and bands using it that – so when I realised that I'd go looking for DJs and producers that I like to see if they have a Facebook page, if it's an official one then its good, it's them posting music themselves.*
Following music-related profiles for music content and updates (not artists directly)	
AP4: *I follow a couple of journalists who veer towards*	**BK5:** *The labels, I find following the labels that we*

the music end of things. I have a friend of mine who actually works in the industry as well; he tweets a lot about what's going on with musical stuff. I would say its music bloggers and journalists, I think this is probably one of the places where I'm getting most musical ideas from, I would say. **GM2:** *I follow the guardian music… one thing about guardian music is they could tell you about fifty artists in one day so again like it gets a bit, too much.* **GM3:** *Lots of record labels, PR companies are not great on Twitter, very few of them have very many followers, a lot of them don't seem to have grasped it at all. There are a couple of people in PR that I follow because they're nice people and I like them and you can have a good conversation. You get interesting social comments from journalists. Interesting social commentators, interesting social figures, people like Bret Easton Ellis or certain actors and certain comic writers, Warren Ellis, I find extremely useful because he just has really good music taste. People from outside my usual frame of circles are very helpful. That's what's good about Twitter, if you follow people who are very different from you or from a very different world from you, you can get a kind of insight and an introduction to things you would never normally think about.* **GM4:** *I don't' really search for it, it just comes up because I follow people and actually I have got a lot of music blogs I follow on Twitter as well so, I don't go in there and use the search function, it's more like a stream that is coming through and I am just picking up on things that come through on my timeline.* **GM4:** *I mean every week I find new music. I follow probably ten music blogs, a bunch of record labels, a bunch of producers, I'd say my timeline is maybe 30% music, and the rest is made up of news and professional stuff and friends so everyday people will post about new music, like magazines post new mixes, DJs are always putting tracks out, there's constantly interesting stuff popping up.* **GM4:** *Twitter is just an extension of the Internet really you know so blogs that I find interesting that put out content that I am likely to want to hear about I will follow there Twitter feed, and it's the same with producers that I particularly like that I really want to know if they bring out something new I'll follow them as well and then I've got plenty of friends who are quite interested in music as well so it's just a nice combination. So it extends internet it's just very easy little bite size packages of content you don't need to spend half an hour reading you can get your 140 character version sandwiches and you can go and read the full version online.*	*use quite regularly, one of our main suppliers would be Play It Again Sam [PIAS Recordings]. And just following them on Twitter and Facebook, there is a mountain of stuff, and they are also not afraid to recommend other labels and stuff as well. So I follow all our main distributors like Forte and Cargo on Facebook and Twitter, and its stuff that we get to sell in the shop.* **BK6:** *I would never really, I wouldn't be searching for music on Facebook I would say. Like I would like artists and things like that and if they put up a video I'd always see that first or maybe. If I like music blogs on Facebook say, Nialler9 would be the big one that I'd always check.* **PR5:** *There are pages that I would like and I kind of go through them. There is one called Panorama Bar music and it's like the Panorama Bar in Berlin and it's just some guy that goes there every night and just puts up tracks that he recognises and stuff from different DJs that are playing and yeah that's a really good one to hear stuff. It's always really random and it kind of spans quite a big area. That's probably one of the best pages. There are other pages like that. There are a lot of blogs as well that have their own Facebook pages; I follow them on Facebook as well. And every week most of them post up ones.* **PR5:** *There are a lot of blogs as well that have their own Facebook pages; I follow them on Facebook as well. And every week most of them post up ones.* **PR5:** *There's one [blog] called "Clumsy and Shy" and this guy does, he makes these like five track shuffles and he has a theme for each one, so like he might have the Summer shuffle or something like that and they are all kind of like Summery tracks and that's really really good.*
Twitter Only	
Following based on tastes and reputation (generally built over time or from recommendations)	
AP5: *Not a specific time but if anybody posts I will usually check it out, I will trust the tastes of my Twitter friends pretty well so I usually follow anybody that posts good music.* **AP6:** *Find out who else is tweeting about the same artist and connect on the basis of both being fans of the same artist.* **GM2:** *And then like I was saying to you before there are certain people that I follow on Twitter that I know are like really into music and they listen to a lot more music than I do, so if they are saying you have got to check this person out, or if they post a YouTube video I will probably want listen to it.* **GM2:** *I suppose you do have to seek it out but it kind of happens by default because of the people I follow*	

[discovering music]. But like day one I would have decided to follow this person but they are not necessarily occurring at the same time. I would follow someone a year ago and they mightn't share someone I like for a few months like.
GM2: *A few of them are just Joe soaps, I follow, one of the best people for sharing new music is Paul Galvin the GAA player, randomly enough like. I think he is, I would have picked up a lot of new music from him.*
GM2: *I think it comes back to who you are following. No offence to my little brother like but if my little brother said 'this is a class song' as he would in his language, I probably wouldn't even click into the tweet because he is just an annoying little kid you know, and then you have people that you don't even know. Like I don't know is it connected to how many followers they have or is that they have done something to help you before, probably both, like that guy … he has got maybe fifty or sixty thousand followers which is pretty big for Ireland, for an Irish guy like, and you know you get a lot of people asking him to endorse things or tweet something so he would be well respected.*
GM2: *What I can't really work out is how to know who to follow, that's the hard part. Like I don't know why I would have followed that person in the first instance or how I came across them. I think when you join Twitter first you probably know someone that was on Twitter that told you 'Twitter is great!' so like two years ago I would have gone on and gone through all the people they follow, followed a few of them, like that is probably how it happened. That's probably where the missing link is, there are people on Twitter that are sharing great artists but how do you find them. I happen to have one or two of them in my Twitter feed but is that by accident? I don't know.*
GM3: *Lots of record labels, PR companies are not great on Twitter, very few of them have very many followers, a lot of them don't seem to have grasped it at all. There are a couple of people in PR that I follow because they're nice people and I like them and you can have a good conversation. You get interesting social comments from journalists. Interesting social commentators, interesting social figures, people like Bret Easton Ellis or certain actors and certain comic writers, Warren Ellis, I find extremely useful because he just has really good music taste. People from outside my usual frame of circles are very helpful. That's what's good about Twitter, if you follow people who are very different from you or from a very different world from you, you can get a kind of insight and an introduction to things you would never normally think about.*
GM3: *There's a little bit of an element to it in that you have to know who's good, you have to know the good stuff, to get to the good stuff, but you kind of prime the pump once you have started; following somebody interesting and you spot their conversations, and you see who is interesting that they are having conversations with and it goes onwards and onwards. It sort of balloons out and before you know it you're in contact and in conversations with somebody that you never dreamed you'd be talking to and you're finding out stuff that is completely outside of what you would have thought of looking for.*
GM3: *I think how Twitter works and the value in it is that someone has gone away and done some research and some work and they are telling you about it and you are like that's great thank you that's why I follow you.*
GM3: *When you are relying on user-generated content you don't know what they're going to do, the whole – like every word could be a hashtag or there could be no hashtag. So I think Twitter is based on reputations and if someone has done something that benefitted you before then all of a sudden they have way more clout with you, because like, last month Paul Galvin tweeted about this song that he listens to when he's going out, and I listened to it and I'm like yeah I agree I'm going to start checking back with him to see what he's tweeting about now. It's kind of complicated though isn't it?*
GM4: *I've got plenty of friends who are quite interested in music as well so it's just a nice combination.*
GM4: *Sometimes it's just whether I have got time to do it or not it's really based on whether I think the people are interesting or whether the blog is interesting, who's posting it, I guess I only tend to follow ones that post stuff that I am interested in so it's sort of a natural selection process over time that maybe I start following people, add people that are relevant.*

Appendix C-3 Chains of Evidence: Affordance B

Table C-3.1: CHAINS OF EVIDENCE FOR AFFORDANCE B	
Twitter	**Facebook**
Browsing content on page (exploratory in nature)	
AP4: *Just looking for musicians or bands that I like, and … seeing if they have anything worth seeing on Twitter.* **AP6:** *I usually start at the music labels themselves. Then they have updates of a few artists all at once.* **GM2:** *I'd look them up on Twitter … go onto their website [profile page], listen to…if they are a new artist they probably only play one song, maybe two, so I will listen through their stuff [all within Twitter app].*	**BK3:** *If I know that I have a friend with whom I would share musical taste. Then sometimes I would go onto their profile and check have they have uploaded any interesting music videos. Or if there is a music video that they have uploaded in their status update I would sometimes check it out.* **BK5:** *Sometimes I check out the Fact magazine online its good they do a lot of mixes on that as well it's quite good and the Quietus as well are not afraid to do stuff*

GM2: *unless you are on a music-dedicated Twitter account. So one thing Twitter did recently, like in the last few months is they, your account now has a kind of media gallery so it's a gallery of things you have shared. Sometimes I do that, it's like if you click into guardian music you can go into their, instead of looking at their tweets you go into their media gallery and it's just, you can scroll through all their videos. So if you were to browse music I think you would need to find someone that's, all they tweet about is music and browse through. But like it's not really set up for browsing I don't think.* **GM3:** *I would seek particular friends on a whole, further down the line from Twitter or Facebook are specialist message boards, forums, communities, and if I was after something in a particular genre or scene or style I would head to one of those. Also, I would head to individual friends, I would look at a friend's timeline or send them a message directly saying 'what's new?' or 'would you have something that would fit this niche I am after?' or simply put out a query on Twitter, sometimes it might be like 'does anybody have any new techno?'.*	*like that so they would be my main ones really.* **BK5:** *The Irish Independent seems really really great at the moment as well so I just keep an eye on all that stuff, labels like Rusted Rail and Osaka, just to see what's coming up, try to pull a new record.* **PR2:** *Then sometimes using Facebook I would go to record companies or small record labels Facebook pages and they'll be posting all about their bands and things like that.* **PR2:** *I could go to one of those bands pages and look at the bands that they have been putting up messages about and videos and things like that. So, the funny thing with Facebook is that once you log on you are kind of stuck there, if you know what you are looking for it can just snowball out of control because this band is recommending this band, this record label is recommending this band, or this band recommends this record label, and you are clicking links constantly it really is the short attention span generation, because you are listening to a band, like on Facebook now you have Bandcamp all integrated, so you could be listening to a YouTube or a Bandcamp clip on Facebook, and you're like 'oh this is good.' But then you spot something else that you want to look at and without thinking you have clicked on that and it goes to another page which stops what you were listening to, which is kind of funny.* **PR5:** *There are pages that I would like and I kind of go through them. There is one called Panorama Bar music and it's like the Panorama Bar in Berlin and it's just some guy that goes there every night and just puts up tracks that he recognises and stuff from different DJs that are playing and yeah that's a really good one to hear stuff.* **PR5:** *If I can't find something that I like and I want to listen to something I will start moving around the place searching blogs and going through Facebook pages and stuff like that there are a lot of pages that I do follow that post up chats and stuff like that.*
Seeking specific content on page (directed in nature)	
AP3: *Recently, when I had heard mention of an Iggy Pop album that, somehow, had slipped past me. I used Twitter to find Iggy's website [profile page], and also to see what gigs/interviews he was promoting at the time.* **AP6:** *One of my favourite bands Metric had a Twitter feed, but I really wanted some more information about a solo project of one of the members. By checking out the Twitter page of the band itself, I could quickly click at the bottom of the page and find what I was looking for. This works for some artists, usually modern ones. I wouldn't use this method with everyone because I wouldn't want my search to be too difficult.*	**BK1:** *I heard about a band and I wanted to find their Facebook fan page, and I went on to it and I found it and they have a tab that you can listen to music and I listened to it, and I ended up buying that album.* **PR4:** *When I first joined Facebook I looked, searched for Arab Strap so that other people who were into Arab Strap, absolute strangers and then that would come up, and then I would look at them from Ireland and go now that's enough for a connection blah. I don't do that anymore because I have met enough people, I have got other friends now.* **PR6:** *If there is a producer that I like I would try and find their Facebook page and then I will find something, one of their songs that I am looking for.*
Facebook Only	
Re-finding content (directed in nature)	
BK6: *If I like music blogs on Facebook say, Nialler9 would be the big one that I'd always check…if he put up a video maybe and I remember that was good then I'd go to his Facebook page and look for it but I wouldn't actively go searching on Facebook for music because I don't think it's the best place to look.* **PR3:** *If there's a track that I'd hear somewhere, and I'd say Jeez I know that, where did I hear it, yadah yadah*	

*yadah. Say for instance my friend S*** G***** is a DJ, he had in a mix there a few weeks ago, track listing when you put the mix on Facebook, the track listing was with it, got to go back, got to go through his posts, find the mix, go through the track listing, find the track, then I know where it is, I know how to find the record.*
PR3: *Or even if someone has posted a song from YouTube, and I remember hearing it, I'll go on and it's tedious sometimes because some people post 20 times a day and it could be 2 months ago, it can be tedious, but when you find it then, ahhh, thank god, then write it down and never forget it then.*

Appendix C-4 Chains of Evidence: Affordance C

Table C-4.1: CHAINS OF EVIDENCE FOR AFFORDANCE C
Twitter Only
Browsing mentions in tweets
AP1: *Usually I just use the search function or the hashtag box. Oftentimes I'll go to search a band and end up on a page that lists people mentioning them in tweets. That has also been an effective way for me to find songs because people will post something like, 'Listening to Bottomfeeder by Amanda Palmer!' and then I end up looking up that song and listening to it too.* **AP6:** *Find out who else is tweeting about the same artist and connect on the basis of both being fans of the same artist.* **GM1:** *If I search for something normally to discover I try terms closest to what I am looking for; the band, the production, the words or names of the songs, you will find them by discovering the songs in other peoples' tweets.* **GM2:** *I would search for Jools Holland, I would put in hashtag Jools and there's normally like one or two of the artists mentioned where people are tweeting 'god she was amazing', and then I go look her up.* **GM2:** *I'll try and do everything on Twitter…if I say hashtag Jools and someone says like there was this one on…last week 'Laura Dunkin was great!' but like they won't just say Laura Dunkin was great they'll say @LauraDunkin was great, so no now you have her Twitter handle, so you've just got to click into it, and you're in her Twitter - which is her sharing stuff with the world so like she's going to be posting all her new videos so I'll click into one, so like within a couple of minutes I'd listen to a few of her songs like and all within the Twitter app. It'll load up within the app…the video will load up and when you're finished playing it you are still in the app.* **GM5:** *Well hashtags, I would follow…if I missed Jools Holland say...I search Jools Holland and I'd go down through the Twitter stream then based on that, seeing what artists were on it, people would have also posted probably other videos of that artist, that'd be probably the most common way that I would actually search in Twitter.* **GM6:** *You get quite focused because you are just drawing from people with similar tastes so occasionally I will take a bit of a leap into the dark and just fling in a hashtag like "new music" or something like that but – and then I do keep an eye on things like the Quietus and the 405 and some of the more sort of left field online music blogs and things.*
Searching for updates or trends
GM3: *Every day I will search for some name of a release or something, search for the artist's name and see if I can find the name of its release because I haven't been able to find it elsewhere online and I know that artist is out on Twitter.* **GM3:** *If there was some music project that had a hash tag attached to it then I'd use that.* **GM5:** *Unless there is something actually actively happening that I wanted to find out more about, if there is something breaking or whatever. I'd search hashtags basically, that'd be one of the more common ways, say Jools Holland that's be one I'd always use.* **GM6:** *Again, it is something that I do quite often, in that I'll – quite a good instance recently actually is that three of the members of Throbbing Gristle have released an album which is basically a cover version of Nico's Dessertshore album with various different people, Antony Hegarty and Marc Almond providing guest vocals on it, and a friends who is a journalist for the Quietus kind of alerted me to that. It was something I was very excited about, I did various searches to lead me to reviews and previews and sort of streaming samples and things. So I suppose I am quite specific in my searching on Twitter, I mean I don't type in avant-garde and then kind of wade through the results to see what would come out, generally I will be quite specific and quite narrow in my searches.*

Appendix C-5 Chains of Evidence : Affordance D

Table C-5.1: CHAINS OF EVIDENCE FOR AFFORDANCE D	
Twitter	**Facebook**
Discovering content via the activity feed/timeline	
AP1: *Other times someone I follow on Twitter will mention a specific artist or song and I'll end up checking it out and liking them… There are lots of ways I find music I suppose a lot of it is just through word of mouth.* **AP1:** *I've found all of my favourite musicians and songs through the people I am connected to on social media networks like Twitter.* **AP4:** *I just follow links of other peoples tweets, I haven't used any hash tags or anything to find music.* **AP4:** *Just if the tweets make it sound interesting, if the tweets are definitely like 'listen to this!' or 'this is something astounding I've heard.' If people I'm following have those kinds of tweets or re-tweets something from a musician then it just peaks my interest. I'm a leisure time browser of Twitter, I'm not there during work time, so I'm kind of sitting at home in the evening looking through Twitter. I've kind of got the time to sit and hit those links and listen to something.* **AP5:** *Not really, I am sort of new to Twitter, I have kind of always been on it but I have never really spent a lot of time on it. I haven't really done any surfing for music on Twitter but anytime, like as I said that someone mentions something music wise I usually will check it out based on their tweets.* **GM1:** *You discover them on Twitter, you follow the band on Twitter, you realise they are interesting to you, and then they post on Twitter; when their gigs are, when their albums are coming out, about their production or what they are doing, so you kind of start building up there with them.* **GM1:** *There would be a few bands those people following people that not even in music industry people just in general and you find tweets that have been retweeted by somebody that you know, you find something that's interesting to you and you find a musician or the band.* **GM2:** *I would just click on some people I follow are saying 'got to listen to this!' If I actually, in general, if I see any status saying 'you have to listen to this!' no matter who it is I will probably listen to it like.* **GM3:** *I tend to put up more than I search Twitter actually. As I said I kind of browse idly, I let stuff float past.* **GM3:** *Just this morning, I don't know if this counts as discovering new music as it's an act I already know but this production team that R 1 Ryder posted a bootleg of Kendrick Lamar posted on Twitter this morning and I've been playing that all day and playing it to people and sort of spreading it around. So that was something just this morning.* **GM3:** *I found that on my timeline, that was literally the first thing I saw this morning before I'd even had my cup of tea. I switched on my iPhone and spotted that whizzing past because the picture moves a bit*	**BK1:** *There are like shops, like music shops which have set up their own Facebook pages which post videos as well of bands or music that they recommend and there are things that they have in stock, which is a great way of finding music, because rather than actively searching you just let this community that you've liked post something and then you'll find new music and that's why Facebook is good because you can like these kind of groups.* **BK2:** *The only way I browse for music is through the newsfeed, if I ever go on that and go 'oh did any one put anything interesting up?' I normally kind of skip through them, but the odd time if someone has a music video up I might be inclined to click on that.* **BK3:** *I would rely on a small handful of people, for music. It all depends on how busy I am, if I am busy and these five or so people are putting up music videos left, right, and centre, if I don't have the time I won't look, but if I have a little bit more time I will.* **BK5:** *I think in the evening and people like I say a lot of people are – a lot of your friends will post up links and you'll check them out and stuff like that. There's a lot of festivals this summer and later in the year that you want to check out what's happening – there's a vast amount of audio out there getting through.* **BK5:** *Just following…the local scene is really massive as I say I don't really have a system for locating music I think again it just seems to pop up regularly…We do have local promoters who put on lots of cool stuff so it's good to keep an eye on what they are at.* **BK5:** *Obviously blogging would be another thing as well, you've got local kids like "Fractured Air" and "G-Man Blog", "We Are Noise" and that's great. It's another way of checking out great stuff. We Are Noise do lots of different features like people pick their five favourite tunes and I know a lot of people check that out as well which is cool, it's a good way of sitting down and checking out what humans are listening to. So the bloggers as well even though I wouldn't really go crazy for the general blogging culture, I like to support my friends and they've got good ears as well.* **BK6:** *Embedding the videos is very good, you can just play it and go out about your business you don't have to you know sit and watch it or whatever if there is a video involved. It's effective for artists if they have built up a fan base on Facebook you know they can just send out the video because everyone will see it because everyone is on Facebook everyday so they can always see what people put up so it's a good way of spreading information I would say rather than…yeah…I don't know. If I was an artist I wouldn't like expect Facebook to be the central way that I would get my music across to people maybe. I would put up a video and say 'if you want to see more check out under here' or something like that.* **BK6:** *Because you don't have to wade through loads of*

slower first thing in the morning so I just spotted it. **GM4:** *I don't' really search for it. It just comes up because I follow people that… and actually I have got a lot of music blogs I follow on Twitter as well so, I don't go in there and use the search function, it's more like a stream that is coming through and I am just picking up on things that come through on my timeline.* **GM4:** *I mean every week I find new music…there's constantly interesting stuff popping up.* **GM5:** *I'd read whatever reviews in the papers and the blogs but ah again, if I saw someone, a lot of these blogs will post a review on Twitter and you click into that, you click into it that way.*	*crap music to get to it, like listen to the radio or something. You know if someone puts up a good song there's always a link to it so you can always avoid all the crap.* **PR2:** *So, the funny thing with Facebook is that once you log on you are kind of stuck there like you know, if you know what you are looking for it can just snowball out of all control cause this band is recommending this band, this record label is recommending this band, or this band recommends this record label, and you are clicking links constantly it really is the short attention span generation like you know, cause you are listening to a band, like on Facebook now you have Bandcamp all integrated, so you could be listening to a YouTube or a Bandcamp click on Facebook, and you're like 'oh this is good.' But then you have spot something else that you want to look at and without thinking you have clicked on that and it goes to another page which stops what you were listening to, which is kind of funny.* **PR2:** *I would definitely go to SoundCloud and Bandcamp first but it's more a case if you stumble across it on Facebook and they've got it linked in so you stay on it* **PR2:** *I can't say Facebook itself is amazing for going finding directly the music that you want, like I say I use Google for that but stumbling upon new music it is great.* **PR3:** *Yeah, there was a time recently alright, and I went away and I ended up buying, it was actually yeah, one of the lads posted, I wouldn't really have been into anything by Jamie xx and it's one of posted a video he did a remix of that Adele thing, rolling in the deep, never, I hate her, I wouldn't have really listened to much of Jamie xx's stuff at the time and then, was it warren put up the link one day and I listened to it and I said grand, buy the record straight away, and that was just pure fluke cause I was just sitting there looking at the screen and next thing it popped up on timeline and I said I'd give it a listen and you know.* **PR3:** *Facebook is a case of, if I want to, if I want to find out what the lads are playing, if I'm bored and like anytime that I go onto Facebook, there is always one of the lads who posts three of four tracks. Ten, fifteen minutes time someone else is doing it. It's just a constant stream of YouTube videos or SoundCloud links. Erm, so if anyway if you hear a tune and you have a tune in your head or you found a record that you haven't heard, listened to in ages onto Facebook, put it there, do ya know.* **PR4:** *I would give it a six out of ten for effectiveness because things get lost very easily. I always find I don't know why even when you set your search settings for it to be kind of not most recent but things weighted most by things you've already commented, things still get lost in all that a lot. The filtering is not that great.* **PR4:** *in terms of discovering new music it would be friends posting stuff from YouTube to Facebook. That would be the main thing. So I suppose the Facebook timeline which is people not specifically posting it for my attention and me not specifically going to look for it.* **PR5:** *But, yeah the timeline, or the homepage and just*

	some of my friends just post up tracks, you get it that way. **PR6:** *it's good that people post songs that I like so when people do post songs and I listen to them and I like it, it is good that way, but it's not as good as going into a shop and finding it yourself, because this is a song that someone else has found, and it's showing the world about it but whereas if you go into a shop and find it yourself it means a lot more.* **PR6:** *Friends as well, pretty much everybody that I am friends with on Facebook or any page that I have liked, most of them introduce me to music at some point when they post up a YouTube clip or a mix or something.* **PR6:** *It's not the most effective though I still prefer going into a shop and looking for it, it is a good starting point. I prefer going into a shop and looking through the music myself. I prefer going through the records, that's part of the fun of it for me like Facebook is kind of like an addition, it's almost something that I kind of, that I use downtime, so if I happen to come across a song that I like on Facebook that someone has posted its good but like I wouldn't necessarily go to Facebook specifically to find music so I do that more when I am going to a shop to buy records.*
Artist-based posts (closer relationships and interactions)	
AP6: *I had not heard the new album from Amanda Palmer, but I was following her on Twitter. She added links to sneak peeks of her music and I was able to find out information about release date, how to order it online, etc.* **GM6:** *OK this is quite a recent one, a band called Ultrasound who were kind of hailed – around about 98 or 99 – they were kind of hailed as being the great future of British music; kind of interesting combination of progressive rock punk and glam rock. They had a couple of singles, they got to front covers of Melody Maker and NME and they kind of exploded or imploded rather spectacularly before they actually got anywhere. They released one album and then through – I think it was a charity benefit for… it was held just after the death of Tim Smith from The Cardiacs – they put their differences aside and got back together again, did a live gig and actually found they could be sort of together in the same room without beating each other over the head. Basically through Twitter discovered that there was still quite an appetite for their music out there from the old fans who had still been playing their albums to death in the interim and they got back together again and they just released their second album thirty years after they exploded and I wouldn't have known that was happening were it not for Twitter. And again they keep a very tight relationship with their admirers on Twitter and again it is quite a personal relationship. I think it's nice, it seems to be kind of getting rid of some of the sort of bullshit aspects of it, almost taking it back to an ideal that feels somewhere between the lines of the quite sort of immediate relationship that sort of punk bands had back in the 70s with fans producing fanzines and again the kind of – almost back to that sort of folk*	**BK2:** *When I hear bands, I will go and search for their band page and go and like it so that then if they have a gig coming up or if they are posting up videos then that will come up in my newsfeed. So I have done that quite a bit.* **BK3:** *I have obviously liked a number of bands, so their stuff would come on my homepage, on my Facebook from time to time, but generally my visits are short lived, I don't have to time to go look through them too much. I would usually take note, I mean, if they said something like 'we will soon be having a tour to cork' or whatever I would definitely click on it and have a look you know. But it would depend on how relevant it is you know. If it was something like 'check out our latest pictures' I wouldn't look at it.* **PR2:** *Bands are getting better at keeping their pages and stuff up to date like there are more and more bands moving from having an official band website to having a Facebook page, because you can put up just as many links, you can put up just as much music and videos and stuff like that. And yeah it's a great way of finding music, a lot of it is stumbling, I can't say Facebook itself is amazing for going finding directly the music that you want, like I say I use Google for that but stumbling upon new music it is great and you know like anything the majority is crap but you need to sift through that yourself.* **PR3:** *if I've recorded a mix at home, I'll upload it to my SoundCloud account, which is linked with Facebook, so as soon as it hits SoundCloud it gets posted publicly on Facebook, and again like it's there for people to listen to if they want to they can, if they don't, they don't need to, but again, with, on the flip side of me following the lads and listening to what their playing, they're doing the same to me and commenting on*

ethos, that kind of cottage industry ethos, I mean when you hear about again Amanda because you have to talk about Amanda in this context because she is the first person to have really really run with this I think. But you know with her doing her ninja gigs and with putting out on Twitter and saying 'OK right I am going to be in this square in half an hour come along and bring a banjo', it is really back to almost folk tradition, and you know it stops that quite sort of hierarchical relationship that you used to have between the musician and the audience because you don't have that sort of holds of a millions dollars' worth of marketing that sits in between the artist and the fan. **GM6:** *Definitely the immediate information between the producer and the consumer I think is a big selling point. One thing that I find very interesting and very engaging is when artists use Twitter and other social media to get a kind of working process the way that a band will suddenly put up 'we are in the studio at the moment this is what we are doing' and the fact that you can kind of follow the actual creative process of an artist in a way that you couldn't before.*	*what I'm doing and kinda if it's shit they'll tell me and if they think I should try something different, they'll tell me the same as I'd say it to them. You know.*
Nature of discovery (immediacy/new/diverse)	
AP4: *It really is just a recommendation piece. It really is, I haven't got a whole lot of time to kind of listen to a lot of radio, I live in the states, the radio here is actually awful, if you listen to broadcast radio, it's absolutely awful to find any new music whatsoever. So I really am confined to listening to internet radio for new music, and it's even just mostly the BBC, that's just what I'm used to. Twitter is just one of those places where, I've mentioned it before, but it just falls in my lap; it's right there in front of me, there is no reason for me not to click that link and listen to something new, that's what I like about Twitter, it almost forces me to say, 'alright, let's try something new.'* **AP5:** *I think it's, like I am more able to explore those kind of stranger tastes in music that I have the more eclectic tastes, I can, it's a little bit more acceptable to have those kind of tastes, and I can reach out to people who are in other countries who are you know interested in other types of music on their social demographics and things like that and get more music than I would have before like social media.* **GM3:** *People from outside my usual frame of circles are very helpful. That's what's good about Twitter, if you follow people who are very different from you or from a very different world from you, you can get a kind of insight and an introduction to things you would never normally think about.* **GM4:** *It just brings stuff to you rather than you know going out researching you know, spend lots of time, it's great you don't spend as much time doing it, but it's quite nice, and it has this immediacy and the sort of you know the now-ness about it is consistent.* **GM4:** *I just, it's used by a lot of people as a content distribution platform no, it's not just, it's not the sort of pure conversational social thing I think a lot of people, when they want people to know about something that they've just done, they put it on*	**BK2:** *As I said if they put up a new video or something like that I would be inclined to look at it. Probably more through Facebook because it's just presented to me, it's kind of a lazy way of having all your interests in one place. Because obviously it wouldn't occur to me to Google them every day yet if I go on Facebook and they put something up like 'oh we are doing this a gig here' or 'here's our new single' or 'here's something we recorded yesterday' I would be much more inclined to click on that and have look at it within Facebook.* **BK5:** *I think, to have umbrellas now as well again as a filter its massive I mean there is so much, if you don't want to restrict what you are going to listen to. I always surprise myself everyday what I'm liking like you know I don't really like a whole lot of house and techno but every now and again I dabble in it, there's something there for me, I don't want to admit to it.* **BK5:** *I would indeed [be on Facebook daily] I mean you can see what people are talking about as well and it's good to get an idea of what's a buzz at the moment and for a business that's kind of – that's quite important – obviously we would like to create some trends as well; it's a bit more difficult now. It's good to see what people are talking about, and if people are bigging up a title and we get to hear it and we like it - it's great for us when it comes to presales we can get a lot of extra stock in and…boom…get it up on the Facebook page and hopefully create some interest in sales out of that. So yeah that's quite important.* **BK5:** *That happens all the time, even like for instance LP was recommending the "Gas Lamp Killer" record and was checking it out and there seems to be a buzz about it when you clicked onto the stuff and the record sold very well for us. So it's a case of just checking to see what people are listening to.* **PR3:** *There's just the fact that it's so easy for someone to post a track there, that you don't have to go away*

Twitter and so it's a great way of being really you know really up-to-date with what people are working on, and it's a nice conversational when, its different to just going into a record shop just looking at a massive pile of records it's just sort of more focused interesting sort of contextual way of consuming music. **GM5:** *[Twitter] strengths, the immediacy, the way you can actually pick the information you want, you don't have to listen to a wash over from people you don't want to hear from, drawbacks, it's probably addictive [laughs], I suppose you can probably get caught with a small group of people you follow who will always have the same opinions as you rather than a diverse set of opinions, that's probably not good either like you know.* **GM6:** *Well things like the Quietus, the 405, obviously recommendations from friends and from other artists, let me think what else? The Guardian being a forty-three year old you know well liberal that's obviously quite a big one for me. I am just trying to think – this is why I should really try to arrange my things into lists, but I have never quite got organised enough. I think people, I mean I'm up to nearly a thousand people that I follow so I really should, but I kind of quite like the chaotic nature of it. I quite like the fact that I can get a link to you know a sort of scholarly article on Jackson Pollock followed by a picture of a cat, followed by somebodies press release about their new album, I kind of like that chaotic approach. It's funny now you say about blogs I can't, like I say, I follow, yeah, I mean I do follow individual kind of journalists who kind of blog all over the place but I can't think of any specific music-related blog that I follow that aren't' kind of attached to a broader online publication if you see what I mean.* **GM6:** *The strength and weaknesses I think both kind of spring from the same thing, the speed and immediacy of it, is that you don't have to read your way through an entire article in a music magazine but then on the other hand it moves so fast that you can miss stuff, that you might be interested in, so again that's where the being kind of quite smart and focused in the way you search it comes into play. Definitely the immediate information between the producer and the consumer I think is a big selling point.* **GM6:** *I suppose the other thing, occasionally I will kind of look at trending topics, but generally those end up with me rolling my eyeballs.*	*looking for or with someone coming up saying, 'Oh this song is great' and giving you the name and you've to go away looking for it, they put the video there or they put the SoundCloud link there so you can just play it in Facebook … You don't even have to open a new tab like.* **PR4:** *I don't go out to find music via Facebook, but I have a couple of friends – huge music nerds- who share, watch some YouTube and share it and I will then get it that way. I'm not going to find it, it comes to me. From event pages like – hopeless noise are playing Saturday week with a band and I was, like I'm working it anyway but I'd go onto that to find out about the other bands but yeah so I suppose I would. But once again I get hooked by something; someone has thrown out the thing for me to look for rather than…* **PR4:** *New music, people that I follow a lot, a guy called Phil Hope who is a DJ who specialises in 7inch records and sometimes he even goes to the point – there is this subculture of YouTube that if you can't find a song generally they are all rare 7inches from the fifties or whatever that people just use their camera phones and record the record playing, and you just hold it and it is shaky footage but you know it is just audio. Sometimes he would just share something like that and I would go 'oh I like that' or after a minute turn off. So that situation has happened a few times with a few people. Music information things like support acts things like making sure you have the correct time and venue and I would do that. But I would refer to that as almost a post-it note approach where I have already come across that information before and it is more like clarification and reminding rather than finding out information.* **PR4:** *it's made it easier to possibly find new stuff and casually find new stuff. It's a great way of spending – wasting time… How has it changed? Obviously with smart phones it is a lot quicker, the deluge is even faster.* **PR6:** *I visit the blogs a lot, I think that's something actually that's changed, or not changed but I have noticed it recently, maybe it's because I am friends more with the people who do the blogs but a lot of people now who do blogs post the blog on Facebook as well or they will post a link to the blog so it's good that way, you mightn't have checked the blog in a couple of day s but you'll see, a guy will have posted up that he has posted something up on the blog so its handy that way, it's a new, instead of having to check the blog every day you will see when some guy has posted on his blog.*
Social influence and reputation (continuous interaction)	
AP1: *I usually send my favorite people's Tweets to my phone. (As in my absolute favorite artists and my closest friends and family.)* **AP1:** *I was very new to Twitter about five years ago and one of the first people I started following was @kylecassidy. He's always been one of my favorite photographers and one day he tweeted a picture he had taken for a Dresden Dolls album. I looked up the Dresden Dolls and started listening to their music and*	**BK1:** *Facebook is good because it allows you to interact with your friends, and with a music blog, a music site, or a shop and they can post and give you ideas for new music, and you can give your friends new music. So it's a good way of finding new music because you're interacting with people that you have the same or similar tastes with.* **BK2:** *The only I would see me finding random or coming across new music that I haven't heard of*

loving every second of it. I started following the female singer of the band, @AmandaPalmer and have been listening to her music ever since. Since then I've been able to meet Amanda on several occasions and become quite close to her. None of that would have ever happened if I hadn't discovered her on Twitter!

AP3: *Almost always discovered by seeing someone who I follow mention a band or song I don't know. Discovered @AmandaPalmer from random tweet from @NeilHimself, likewise discovered Tame Impala from random @Glinner tweet.*

AP6: *I trust the artists that I follow to send me their recommendations. If Amanda Palmer writes 'Check out this new single by ___' then I am definitely going to. I don't look at it like artist/fan relationship, but more like 'trusted music critic / music lover' relationship.*

GM2: *And then like I was saying to you before there is certain people that I follow on Twitter that I know are like really into music and they listen to a lot more music than I do, so if they are saying you have got to check this person out, or if they post a YouTube video I will probably want listen to it.*

GM2: *And then you get the conversation like you were saying there, under the link and someone might say 'oh you got to listen to her version of this!' or 'she reminds me of this person' and then you have got another person to check out.*

GM2: *A few of them are just Joe soaps, I follow, one of the best people for sharing new music is Paul Galvin the GAA player, randomly enough like. I think he is, I would have picked up a lot of new music from him, I follow the guardian music… one thing about guardian music is they could tell you about fifty artists in one day so again like it gets a bit, too much.*

GM2: *With one of my good friends that happens quite a bit like. He doesn't work that much, so he is just sitting at home listening to YouTube videos and the good ones he tweets. Last month one of the guys I follow, who never tweets about music, I follow him for, he's big into marketing like, and he said something like 'someone's got to get this guy a music contract!' and a YouTube video and again I would consider him to have very high clout in my Twitter network so I listened to it and really liked it so I actually left Twitter and I went onto YouTube and watched all of your man's videos this guy, this kid from Dublin. So that was just randomly scrolling through my Twitter feed. Like normally he's talking about how to increase your fans on Facebook or something and this just happened to be he was out of the work frame of mind and just chilling out like so yeah it can be random, definitely.*

GM2: *I think it comes back to who you are following. No offence to my little brother like but if my little brother said 'this is a class song' as he would in his language, I probably wouldn't even click into the tweet because he is just an annoying little kid you know, and then you have people that you don't even know. Like I don't know is it connected to how many followers they have or is that they have done something to help you before, probably both, like that guy … he has got maybe fifty or sixty thousand before is via friends pages, when they put up videos.*

BK2: *I'm thinking that the only way has happened via Facebook is if a friend puts up a video and says 'this is amazing!' and depending on the friend [laughs]…I might be like oh, OK, I'll check this out this might be worth checking out. So that's how that would happen.*

BK2: *Like I said a lot of my friends on Facebook are musicians. They would be interested in the music I am interested in and also would be quite adventurous in finding music, I don't think I am actually, I'm a bit lazy, whereas I have some friends who are constantly seeking new bands and new music, and even just YouTube clips of particular musicians or whatever and they are putting them up all the time and I think that's great.*

BK2: *It's great because I trust a lot of my friends. But also I really like that I am getting exposed to this music that I probably wouldn't find otherwise and it's a great way of sharing something great that you have just found. And it's not kind of advertising, you kind of can't trust, sometimes, the Internet and what it throws up at you when you have searched for something, whereas at least when it's a friend of yours putting it out there you are more inclined to trust their judgement and know that they are putting it up there for general use, they actually think it's good.*

BK3: *I think again it is kind of just, looking, someone might have uploaded a video on their Facebook and it comes up in your newsfeed, and maybe if you have sort of heard the name you might just click on it. I can't think of a specific time where I did, I have done it in the past. It's normally like if we'll say a friend has been banging on about a particular band and I may not have heard of them and then they upload a video of that particular band then I might check it out.*

BK4: *Generally it would be through friends of mine posting up a video or a link to a SoundCloud or a Bandcamp and saying this good. Like I said before if I think I like what they are into – you can tell sometimes if someone posts something up and says it's really good you just know you're in two different wavelengths and you're not going to like what they like. But most of the time if they put it up – a lot of the time I think 'oh I should press that link' but I don't cause I don't have time and then I forget about it, so it is very much – it's almost connected with the amount of time you have and how willing you are to click that link and if you don't it's like a new band that you might be obsessed with or else you might forget about them, so it is quite like temperamental I suppose in that.*

BK6: *I'd have a couple of friends that I would always listen to what they put up because I respect their music choices or whatever so, say if someone from past put up a video I would completely avoid it because I'd be pretty sure I wouldn't like it. But then say like people who I like similar music and are always open to the same kind of music as me, say like a couple of friends and then there would be blogs so any bands I'd like I would always like them on Facebook just so you can get up to date information. Blogs like Nialler9, Pitchfork…I'd like record labels that I like so like Warp records or 4AD and all those , I would*

followers which is pretty big for Ireland, for an Irish guy like, and you know you get a lot of people asking him to endorse things or tweet something so he would be well respected. **GM3:** *Lots of record labels, PR companies are not great on Twitter, very few of them have very many followers, a lot of them don't seem to have grasped it at all. There are a couple of people in PR that I follow because they're nice people and I like them and you can have a good conversation. You get interesting social comments from journalists. Interesting social commentators, interesting social figures, people like Bret Easton Ellis or certain actors and certain comic writers, Warren Ellis, I find extremely useful because he just has really good music taste.* **GM4:** *But somebody that I respect the opinion of I might then use that as a sort of spring board, to go and look at other stuff related to it.* **GM5:** *Well it's mostly the type of person that would have posted, you get used to, you get to know your followers that, the ones that if they post a music link, you probably like. Other people you just go past their - you don't follow them for music; you know you follow them for you know sport or whatever. That you, it's basically based on who posts a link, rather than what it is I suppose.* **GM5:** *It would be just based on their online activity, well there would obviously be specific music accounts like guardian music or whatever but no I'd generally… you tend to… once you are following one of these people they'll retweet something and you end up following… it would be wise to put them in lists, but you know, you get to know the ones that you take, you count when they post something.* **GM6:** *There is something about the language that is used you know, if somebody retweets a link and there is no kind of description around it I won't, I generally won't click on it because I think I haven't really got the time to, I want a headline before I follow a link. Again being a grumpy old pedant if it is full of text speak I generally won't click on it. I think a lot of it is about the language and I suppose there are certain key words and there a certain people if they retweet something I am more inclined to follow it you know, to follow the link. So I guess in part it is a linguistic thing and in part it is about my experience of whoever has tweeted that. I have got some close friends who's musical tastes I really don't gel with [laughs] so I generally I will follow their tweets but if they put up a link and go 'oh listen to this it's magnificent!' I won't because I know it will make me grind my teeth in horror.* **GM6:** *I find nothing more irritating than following somebody that constantly retweets and shares anything that they see.*	*always like them just because if they have good music they generally sign other artist who have put the same kind of music.* **BK6:** *I would say the shear amount of times I'd click it…I don't know. Like if someone puts up a good song and puts up another one I'd check it out. If someone puts up a bad song I might just kind of say 'oh I'll leave that slide because it wasn't great the last time.' Yeah, just if they keep putting quality songs up I'll keep clicking.* **PR1:** *Yeah, even just last week someone posted a video of a band called "Little Green Cars", so I had never heard of them and they just put the video up on it and they said it was from "Other Voices" so because I know Other Voices and I know Other Voices usually have really good bands on it, I checked out the video and they were really really good.* **PR1:** *Like when [a friend], posts up "Radiohead" videos or other such videos I know what he listens to, so when I see he posts videos I usually check out what they are.* **PR1:** *Usually on social sites if someone has really good things to say, about a band, you kind of take into account that you know who that person is and you kind of generally know there taste in music so you can assume that it's worth listening to.* **PR3:** *Other than, someone I know posting a track or me remembering something, going back and digging to find it, I know there are ads to come up on the side a lot for new songs or new videos and new albums but generally there by shit bands with a lot of money or people like David Getta who are just selling the music, it's never, I've never really come across something other than what's the lads have posted.* **PR3:** *The majority of the time, it's kind eh the main core of my friends who I would pay attention to what they post are all involved in music so...* **PR3:** *I mean, the same would go for bands like if, if I think a band is good and going on what they've released previously, I'll give there new track a listen to, if I know that over the years that the lads have been playing good music that I generally like, if they post something more often than not you're on a winner if you listen to it like.* **PR4:** *Well one fella would be very known in the local music community, but he has a million nicknames, Richard Delaney, Postman Richie, Postrock Richie, guided by Richie – he is obsessed by one band called guided by voices, so you can always be sure if there is anything new by Robert Pollard, up it goes, that 7inch DJ, who I just listen to knowing it will be a funky soul thing, there are a couple of fellas in London.* **PR4:** *I wouldn't say I take everything else with a pinch of salt but those people have already – like if Malcolm Middleton or Aidan Moffat the two members of Arab Strap posted up something new or were working on something new I would make a point of keep an eye out for that or if there labels do…* **PR4:** *It's a handy, they are handy beacons. Again I don't place – one of them likes to play a lot of soft metal from the eighties and like I am not even going to bother clicking on that because you know we all have our foibles.*

	PR4: *But it would always be a continuation of what I already knew about them. Like sometimes once or twice over the years people have posted Loudon Wainwright songs who is someone I really like and seems to be incredibly unknown Rufus and Martha's father. I never knew you were a Loudon Wainwright fan and sometimes people would go I never knew you were an Arab Strap fan. And it is not like these are secret communities it's just a thing. I remember once somebody in a podcast I was listening to mentioned a friend of mine and she didn't know that all three of them knew each other so yeah I tagged that, that's more of a friendly thing as opposed to…and re-evaluating old connections re-establishing them.* **PR5:** *well I have a lot more conversations with them. I trust their judgment and stuff like that, well not their judgment but they have similar tastes to mine. Not to say that I won't – not listen to something if somebody else posts it up but yeah some people put up some really good stuff.* **PR6:** *It's a mixture because there would be a lot of people that I would know in Cork or in Ireland a few people that I'd know that would post up songs regularly and I check those out and there are people that would post up music or sorry mixes. But there are people who I am friends with in the States, who's music I like or people in Europe who's music that I like that I don't actually know so it's kind of a mixture.* **PR6:** *I could have a couple of people who I'd really respect music-wise and if they, I would generally check out something that they are posting if they are saying its good then I know it's more than likely good, I might not like it but it's probably good. A lot of the people that I would be friends with I would know them already and I'd like their music already or I'd know that they are good DJs and that they would select good music so I'd have an idea already that I like them. Facebook wouldn't really contribute to me having any more respect for them as musicians or DJs or producers, I would already know that I like them or that they are good.*
After discoveries activities (including: sampling, searching, exploration, further discoveries)	
AP1: *Well when I see a Tweet mentioning a song or artist I just click on the name and kind of explore. But when the name isn't on Twitter I usually just Google the song or band. However they almost always can be found on Twitter nowadays.* **AP4:** *I would say the prime example would be Amanda Palmer, only because I was aware of her only from her old band but I hadn't looked any deeper into what she was doing. Just the fact that it was back in October, I think, when this chap I was talking about, Rob the Anonymous, was tweeting about going to see Ivan Odds, and I said, I should check this out to see what it's all about. So I followed some of his links, watched some videos on YouTube and I was like, ok, this is pretty good, this is stuff I could listen to, and when I found her on Spotify, and I listened to a couple of albums of hers on Spotify, I ended up buying the albums just because I thought they were good and I wanted to listen to them in my car. I actually do pay for music I listen to. I know it's kind of an old school*	**BK1:** *Well, I remember someone had posted a video to a particular song and I clicked on it and it brought me to YouTube from Facebook, I listened to the song and I noticed there was recommendations on the YouTube site, I clicked one song, liked it, clicked another song by that band, liked it, and then I ended up buying the album… Yeah because they posted a video and then I listened to the music and then I just got intrigued as to the recommendations on YouTube, so I was actively searching then.* **BK6:** *Apart from my friends putting up a link to a song or something like that and then I'd click on that and I'd love it and I'd go…like I'd always move away from Facebook for the hard core music information for the more links because I don't think you can find that kind of stuff on Facebook.* **BK6:** *I never get one artist at a time I always find that artist and then find a whole different kettle of you know, bands that are like them or whatever you know.* **PR1:** *Not really, I mean it's always easier when*

way of doing things, I often feel, I've got some cash now, I can afford to pay for this. **GM4:** *Videos less so but kind of all of the above [video, audio, articles] to be honest. It's just a bit, if it sounds interesting then I will check it out I don't really mind if it's like what maybe that's the good thing about blogs, if it's one of the music blogs I'd probably go … audio clips are good.* **GM4:** *No it just makes me if somebody is shouting about, blogging something it would probably make me interested enough to listen to it but it wouldn't shape my opinion on what I actually thought of it once I listened to it.* **GM5:** *A friend of mine was watching a TV show a couple of months ago and there was a song on it he hadn't heard before, he found it on YouTube, he posted it, and I clicked into that from Twitter and went on, with related artists, then I would go into Spotify and listen to more of the artists, and linked on to other artists.* **GM5:** *Generally it is just people posting, you know it, well I suppose if a promoter I promoted, or you know at cork video said there is a band playing here tonight I would actively look up that band again on Spotify or YouTube.* **GM6:** *In fact with likes to Amanda Palmer, it was when I think probably about 18 months ago maybe two years ago, there was a little tweet from Amanda which sort of said something along the lines of right everyone get over to this site now something interesting is happening and it was her, one of her webcasts, and she had just basically, had kind of picked this nineteen year old boy up off the street who was a piano prodigy and he just is a lad called Tristan Allen and he just met her on the street and then said I'm a fan can I play you some of my stuff and the rehearsal rooms at his college were closed and she said yeah come back to my place and he sort of blew her away and sort of played this stunning sort of Philip Glass type minimalistic quite avant-garde piano stuff. She was just so blown away she set up a webcast and started broadcasting. Basically the two of them did this sort of two hour recital stroke interview, and it was incredible and it felt quite intimate and very exciting the fact you know that I was able to sit in my living room in Bristol and watch this thing unfolding in Boston live with about another 2000 people watching it and you know people were kind of commenting on the Twitter stream and asking questions, so it became a very interactive thing. And then Amanda produced an album for Tristan which I bought the day after it came out. So that was I think – that was actually one of the first moments when I really kind of got the intimacy side and I understood that aspect that social media can provide. There is quite a, on Amanda's blog there is quite a long – the full story is there in Amanda's own style it might be worth looking into.*	*someone posts a video as opposed to a description because you can click directly on that video and straight away you are listening to the music.* **PR2:** *So, the funny thing with Facebook is that once you log on you are kind of stuck there like you know, if you know what you are looking for it can just snowball out of all control cause this band is recommending this band, this record label is recommending this band, or this band recommends this record label, and you are clicking links constantly it really is the short attention span generation like you know, cause you are listening to a band, like on Facebook now you have Bandcamp all integrated, so you could be listening to a YouTube or a Bandcamp click on Facebook, and you're like 'oh this is good.' But then you have spot something else that you want to look at and without thinking you have clicked on that and it goes to another page which stops what you were listening to, which is kind of funny.* **PR2:** *I think unless they are a really brilliant band there is only so much you can get out of stumbling across a band and listening to them and that's it. You know because when it comes down to it, if there is a really good band that are out and no one has heard of them and a friend tells you about them and you get excited about them and then you see that they are coming to Ireland or… and then you are like brilliant and like you are going and there's only twenty people there or something like that but you are really excited because you know of them and you've gone as a group so, at the end of the day that's the best part of the whole socialising thing which comes from the internet… more and more, but that is the better part, but I suppose a lot of that has started on the internet these days like so.* **PR4:** *Just there, straight away, if someone posts a YouTube clip and you click on it it brings you to YouTube, it's there, they have the similar videos underneath, other bands from this artist, that kind of thing. I know a lot people tend to pay attention to comments and positive and negative thumbs up, that doesn't bother me. I'm confident in my own years that I just you know.*
Facebook Only	
Integrated technologies (including applications and embedded media)	

BK2: *As I said if they put up a new video or something like that I would be inclined to look at it. Probably more through Facebook because it's just presented to me, it's kind of a lazy way of having all your interests in one place. Because obviously it wouldn't occur to me to Google them every day yet if I go on Facebook and they put something up like 'oh we are doing this a gig here' or 'here's our new single' or 'here's something we recorded yesterday' I would be much more inclined to click on that and have look at it within Facebook.*
PR2: *On Facebook now you have Bandcamp all integrated, so you could be listening to a YouTube or a Bandcamp click on Facebook, and you're like 'oh this is good.' But then you have spot something else that you want to look at and without thinking you have clicked on that and it goes to another page which stops what you were listening to, which is kind of funny.*
PR2: *Yeah a lot as well, it's just so easy to stick a YouTube clip up and things like that now, and I think a lot of people still with the YouTube URL and it's great they have adapted Facebook so that it's not just a link any more, it's the YouTube video pops up. A link doesn't, look attractive; it could be spam or anything. Friends would constantly post stuff, and every now and then I would stumble across.*
PR2: *One of those, that link thing I have to say closing the page when you are playing something is crap like, even with YouTube videos you know cause you don't tend to go back because you've moved forward for a reason. Facebook, it's still struggling with the players, like they've kind of gotten out of dodge really by Bandcamp and SoundCloud have done most of the work, to create players, so it's not actually a Facebook player that's doing anything very good or very well, so they could definitely change that. The tagging system is a good idea but it can be terrible sometimes, so like I said it's not actually amazing for finding stuff, it's great for stumbling, and I think the same is true for Twitter. It was set up for people, so I think it is at a bit of a crossroads now where it's not sure actually what it is trying to aim at, because it is trying to do everything at the same time never mind all the advertising crap that comes along with it.*
PR3: *They upload the song to it, and when you click on to it then like, you've the, the graphic visualisation of the tune, just press play, and then you do, you do, you can comment anywhere along the track, so if there's say a build up half way through, you can comment on that section alone. emm, there is no other time really.*
PR3: *Well the websites like you do have the DJ websites like resident advisor but again you know that would be a list of songs and you need to go away and find them whereas with Facebook it is provided for you on the screen and you click play.*

Appendix C-6 Chains of Evidence: Affordance E

Table C-6.1: CHAINS OF EVIDENCE FOR AFFORDANCE E	
Twitter	**Facebook**
Suggestions and recommendations to/from connections	
AP2: *I send videos and recommendations to friends using Twitter (or Facebook) pretty often when I think they may like the music. Lately I sent Jay Malinowski's videos to a friend who, although she's into hip hop, she also appreciates acoustic music.* **GM2:** *The odd time I would mention someone at the end of a tweet so that everyone sees the tweet but the person I am mentioning gets a kind of an extra notification like, like a 'I want you to see this, I want you to come with me' maybe or something like that.* **GM4:** *If one of my friends would particularly like the track I would tell them about it so it's just, a sort of little stream of stuff that I like.* **GM6:** *Again, it is something that I do quite often, in that I'll – quite a good instance recently actually is that three of the members of Throbbing Gristle have released an album which is basically a cover version of Nico's Dessertshore album with various different people, Antony Hegarty and Marc Almond providing guest vocals on it, and a friends who is a journalist for the Quietus kind of alerted me to that. It was something I was very excited about, I did various searches to lead me to reviews and previews and sort of streaming samples and things.* **GM5:** *It can start off someone saying check this out*	**BK1:** *I have a gotten a link from YouTube and posted it on their wall and gone 'listen to this' or something like that.* **BK1:** *Either by posting a music video on Facebook, even on their page or just my own page. Or actively giving it to friends around me.* **BK2:** *If someone sends me a link, if someone inboxes me a link and say 'oh check out this band there really good!' I would normally check it out.* **BK3***: Just basic links again, go onto YouTube, copy, paste, into your Facebook, into someone else's Facebook and a quick little logo 'check this out!' or 'have a listen.'* **BK3:** *It's normally through friends, I mean even with a couple of friends there have been Facebook mails going back and forth 'hey have you heard of such and such?' or I've recommended something. It's mainly through friends. I don't buy these music magazines or spend time on the internet looking for tips for good bands, it's generally through people I know.* **BK3**: *If someone has no interest in music then I have absolutely no interest in suggesting bands to them. But if someone is interested, we'll say a friend, James, he has expressed an interest in electronic music and there were a couple of electronic music nights happening, so I sent on a link… But yeah definitely I've*

instead, you know you might like these. Yeah actually, it is usually, someone else will come back with these are quite… like these, oh I was listening to these last week you should try listening to these, so I probably, if you post you are probably going to get something back from it.	*shared lots of different kinds of bands and singers with different people.* **BK4:** *Generally I just put it on my page, I rarely – but I do do it sometimes, I wouldn't do it frequently, just go onto my friends Facebook and say you should listen to this then I know they'll probably find it or I'll see them in person and I'll tell them if I remember.* **BK5:** *But like Facebook has been fantastic and Twitter even as well, people posting up links is great, and there are certain people that are quick enough to just send you on stuff that they think you are going to like.* **BK5:** *Just this morning I guess there is this new record Tamarin and I always liked their jangly echo-ey pop music and I just posted it on a friend of mines, the friends of mine run a blog called fractured air.* **BK6:** *Say like, even say with A*** now I'd be sitting at home listening to a song and I'd kind of go OHH and I could imagine A*** doing that face as a bass line kicks in or something like I'd send it on to him and he'd you know send one back.* **PR2:** *A lot of the newsfeed, I would say and friends sending you private messages you know 'have you heard this band yet?' and those private messages can be like you know they can send the mail to 10 people at the same time, and then I don't know a little discussions breaks out and then someone always has to recommend somebody else 'oh have you heard this band?' 'oh yeah they are great!' 'oh have you heard this band?' cause everyone… I think when it comes back to it everyone like telling their friends about bands they have found, to be cool I suppose. [part of the an online persona] it kind of is, even in real life you know everyone wants to be told what they have done is good so I think it really is that slap on the back kind of or something like that, but it's gone a bit mad with the internet but you still want your friends to like it you know.* **PR4:** *Like sometimes if I find an interesting Ukulele song I will post it to my friends who are in the West Cork Ukulele Orchestra, which is very literal. Sometimes I would respond if somebody posted up – not to get bogged down in cover versions but like a version of a song that I had never heard of but I have another version of that song I have posted it in that status thing. I suppose, I heard a great phrase because I was doing a conference on digital marketing during the week which is a lot people's digital marketing systems are successful in spite of the system rather than because of. It is very scattered, you need one person to post something around the time that I am checking.*
Facebook Only	
Private/Public Groups	
PR5: *I was in America two years ago and we have got this online group there is like twenty of us in there. I know maybe twelve of the twenty but everybody is – putting up tracks that they hear every week. A private group in Facebook, we just call it music dump, like anything, I put anything in there. Like funny stuff, like tracks that I really like or sometimes there is just a vibe going round like hip hop, so I will just put up loads of my favourite hip hop tracks and stuff like that. That's actually really good.* **PR6:** *Mainly just DJ pages, band pages, there's a couple of groups alright, like there is a really good disco rare disco group that's good but it's kind of a buy and sell thing and yeah I can't afford any of the records on it so [laughs]. Yeah I suppose I would find some stuff on it.*	

Appendix C-7 Chains of Evidence: Content Sharing Connotations

Table C-7.1: CONTENT SHARING CONNOTATIONS	
Twitter	**Facebook**
Positive connotations associated with sharing (reciprocity and wider reach)	
AP1: *I love hearing the opinions of my friends and sharing mine too. By hearing others opinions I've actually broadened my musical horizons and listened to hundreds of songs I would not have normally listened to.* **AP2:** *It's as important as the others sharing with me. In this way we can all discover new things that might be special.* **AP5:** *I think share and share alike, if I don't share my interests then other people aren't going to share them with me and then the information sharing kind of stops.*	**BK5:** *I inflict my crap on lots of people but they don't listen necessarily all the time. One that we have all gone a bit crazy for, for instance at the moment is the new Goat record "World Music" and we've sold through on the first batch of records and I have got a bunch more on order and there is a good buzz about it. But that's important I guess, like if you're into it and you're really enthusiastic about it it's easier to do business.* **BK6:** *It sounds like an awful thing to say but I feel I have the "right" taste in music or something like that you know like that everyone else is wrong so I think it's good to put my kind of music out there that people would like.* **BK6:** *Generally Facebook is the easiest place because you know you will always see it. I just generally can't think of like another way people would do it now.*
Negative connotations associated with sharing (aware of audience and reputation)	
AP4: *My tweeting is more work related, I don't share a whole lot of personal or cultural pieces, other than stuff I think the folks who are following me, are mostly related to work, and therefore I'm very judicious about what I am tweeting out. I wouldn't really say I've re-posted a whole lot of musical stuff on Twitter. In fact, I can't think of any time I have. Only because the people I work with, I'm not sure what they're listening to; I'm pretty damn sure it's not the same stuff I am.* **GM3:** *It is a bit of a bind, as it feels like hard work sometimes to have to do it, it is odd saying that for someone who does it out of choice a lot the time but as soon as you have to, like working with a label sometimes, and having to maintain a social media presence, oddly it becomes less exciting, it's going to be very interesting to see whether it gets easy to maintain a business presence as opposed to just a personal presence or whether people just start getting turned off the whole process because of the whole requirement. It's mental energy consuming because of the small bites of information; it's like a hundred small bites of information doesn't take up the same amount of brain space as one bit of information that is a hundred times the size, as they say. That extra mental energy to expend it in the changeover between them and in-between the changeover of mood or of approach to each, so the constant flipping is very, very tiring to the brain and that is something that we are going to have to deal with.* **GM5:** *I wouldn't want to be polluting peoples timelines with rubbish, but I think most people, I think*	**BK4:** *That would be important to me that what I put on my Facebook is good music and people know me for like posting good links and not crap, hopefully.* **BK4:** *Well you build up – it's a different identity you build up there, it's like your internet personality and you can only really clarify what they are like through what they post so I suppose that's really important, then you think 'Oh what I post is really important!' So you generally know, there are a few people that stand out on a day-to-day basis that you go 'oh they posted this!' you can tell – last time I clicked through to a link I really liked it so it would be very different.* **BK5:** *I suppose it's important as well that you don't post rubbish up all the time something that interests you because traffic is so vast you just want to create pockets of stuff of interests. So I mean on my personal Facebook I post up stuff that I am digging and obviously we post lists that Plugd are doing as well but I don't see the necessity of posting up my dinner details up on the internet.* **PR1:** *I like to do it [share music], but at the same time I am not going to force my opinions on other people.* **PR3:** *There are a lot of people in Cork constantly posting utter crap, things they put together in ten minutes and then a lot of fellas then regurgitating the same things over and over again and basically begging people to listen to it. At the end of the day if no one listens to it in the first place then get over it and put up a better one or sit down and have a think about it because there is a reason people aren't listening to it.*

we are at the point that most people who are following me expect, they expect there is going to be a certain amount of music, there is going to be a certain amount of sport, if they don't like it they don't have to follow me you know. **GM6:** *Not as freely as some people. I have to be really…in terms of sharing other content I do have quite a high quality control threshold and do very much think about how relevant it is to my followers. I find nothing more irritating than following somebody that constantly retweets and shares anything that they see.* **GM6:** *I do try to be quite restricted – not restricted – but like I said quite considered I suppose. It's not important to me to share everything that I do, you know, some of my younger friends just share their entire lives – and do I really need to know that? I tend to try and be quite positive overall I think there is nothing worse than being 'Oh I am having such a bad day!' it's like well you know fair enough but this isn't the kind of sympathy call if you get me.*	

Appendix C-8 Chains of Evidence: Affordance F

Table C-8.1: CHAINS OF EVIDENCE FOR AFFORDANCE F	
Twitter	**Facebook**
Sharing external content (initiators)	
Experiential (while listening to music/discovering content)	
AP1: *There are plenty of times I have tweeted when I'm listening to a specific song or have provided a link to some sort of awesome music video that I think my followers would like.* **AP1:** *Usually it's just a tweet with a link. Sometimes I'll post a picture of the specific CD or record I'm listening to at the time.* **GM1:** *I do it on a regular basis, anytime I find anything that I found, even for example YouTube is amazing 'cause you can always share directly from YouTube, log in to your Twitter and share the music. Or anything even your computer you can of course paste any files pretty much nowadays on Twitter some are restricted but a lot of the files you have on your library and in your emails can be shared on Twitter.* **GM2:** *I'd share Shazam things I've tagged with my phone in Shazam I would share. Or, so, I think Twitter, I would share a great performance of something like, if, let's say some band were on TV live and you know it's like, renowned as the greatest performance ever of that song or whatever I'd tweet something like that.* **GM2:** *I never actually talked about Shazam. It's an app on my phone. I use that quite a lot. If I am out I will be using Shazam. So my phone is just listening to the song and telling me what it is. And it's giving me the artists name, the artists website, a link to iTunes*	**BK2:** *Yes, for a lot of the links that I put up. To be honest I put music up on Facebook but also put a lot of articles and things that I find interesting. I would need YouTube in order to put music up it seems. I know there are other ways like Sound Cloud and things like that but in general it's YouTube that I am going to be using for sharing on Facebook.* **BK3:** *I would always go to YouTube first, copy and then paste it into Facebook. So I am not actually working from Facebook as such. It's always from YouTube, so you are kind of going between the two. You are using YouTube to then share it through Facebook.* **BK6:** *YouTube. Always YouTube, so if I was listening to a song on SoundCloud or something like that or I could use SoundCloud as well…but I just copy and paste the link in. Post it on my wall.* **BK6:** *If ever I listen to a song at home and I think that people would enjoy it, like I know I put them up on my page for 220 people to see but I know only like 20 people would ever click it but generally like I think people would respect my music taste and listen to it based on what I've put up in the past or something. I always put up a song that people would enjoy.* **PR2:** *It's just so easy to stick a YouTube clip up and things like that now, and I think a lot of people still with the YouTube URL and it's great they have adapted Facebook so that it's not just a link any more; it's the YouTube video pops up.* **PR3:** *if anyway if you hear a tune and you have a tune in your head or you found a record that you haven't*

to buy it, I can share what I just listened to, to all my social network. So on a night out from when I am in the pub to the club if I don't know the song I am going to Shazam it and then the next day I will go home and I'll download all the songs I listened to. Yeah I would do that quite a lot as well. Even in the car I would be doing that. **GM3:** *Just this morning, I don't know if this counts as discovering new music as it's an act I already know but this production team that R 1 Ryder posted a bootleg of Kendrick Lamar posted on Twitter this morning and I've been playing that all day and playing it to people and sort of spreading it around. So that was something just this morning.* **GM3:** *The example I mentioned this morning, As soon as I listened to it on the iPhone I put it on there. It got "favourited" ten/twelve times and got re-tweeted by a couple of people so literally my first act of the day was to share some music on Twitter.* **GM3:** *There is a constant conversation between Twitter, Message boards and Facebook and all the other ones; I find something on one and then post it across to the other. I don't know if I have a system of choosing what to put on which channel. I bring all sorts of stuff too.* **GM3:** *I would have gone away and listened to Jools Holland or done a Shazam or something like and now I'm going to tell people.* **GM4:** *Yeah pretty much every week I do that. If I had just picked up on a new track that I like I normally just post it on my timeline saying that I like it. If I have just done a new mix or something I might stick that up there…so it's just, a sort of little stream of stuff that I like.* **GM5:** *I do on a daily basis, Spotify is a very good way of just tweeting it, touch of a button, whatever song you are listening to… I just direct to whoever is following me, just post up on my timeline. Like, it is, like, its brilliantly quick, you are more inclined to do it, than not do it almost if you are enjoying it, enjoying an artist because it is so easy.* **GM5:** *I would do YouTube links as well. But ah I probably go more towards Spotify because it is so easy like… it would mostly be links to tracks and to videos.* **GM6:** *Sometimes it's just a sentence giving a soundtrack to what I am particularly doing in the morning, sometimes I will say 'right I'm writing a piece on this and this is soundtracking what I am doing.'* **GM6:** *I mean sometimes it's a matter of sharing something that I have discovered that's new that I find interesting* **GM6:** *I quite often will share music, link to a YouTube, I probably link to a YouTube video or Vimeo or an article that has got embedded music in it, once or twice a week.*	*heard, listened to in ages onto Facebook, put it there, you know.* **PR4:** *Assuming I am working from home and I am on the computer two, three, four times a week I would easily be on YouTube and I would share something. It is a very easy way of sharing things. Like even if I am listening to a song via we'll say a last.FM download be it new or something I am nostalgically putting on I would find it on YouTube and share it via there just because it is such an effective way, it's a great interface and you can also save on YouTube to playlists and make them public so if somebody happens to come across that "Great Scottish Music" as an example that could be my playlist and people could find other stuff through that.* **PR4:** *If I read a blog post I am interested and just share. I share it on Facebook and Twitter.* **PR4:** *When I buy something on Bandcamp or even download it you can usually click tell your Facebook followers that you have done that, I would do that.* **PR5:** *So a lot of the time it is tracks like that. Shazamming stuff and then I will post it up on Facebook then as well. I don't know why I put it up on Facebook, it's just, sometimes people like it you know, two or three people like it then hopefully they start listening to it and maybe it just kind of grows from there.* **PR5:** *Like today there was nobody in the office and I had my headphones with me so I was just listening to tracks while I was working and then I was just posting up a few them. [YouTube to Facebook].* **PR5:** *When I post tracks maybe like three or four a day depending on what day it is. Anytime I record stuff I always put it on Facebook first. And anything I just want to discuss I will put it up.* **PR6:** *Well I suppose, say if I found a song that I like whether through Plugd or I have just been kind of looking around the internet and I found a song that I like I go to YouTube to see if I can find it on YouTube, if I find it on YouTube then I will go to Facebook and post it on Facebook and hope that other people will see it and like it as well so.*

Sharing links to music content often in a social context (someone might like this)	
AP6: *I think it is important to show my tastes with others, but not always my opinions. When it comes to music I would be more comfortable talking about a piece of music I enjoyed rather than mentioning music that I did not prefer.* **GM1:** *I think it is great that you can actually see what other people like and that way it gets closer to you, you know.* **GM1:** *I post both, I mainly post to everybody and then if I am interested, if something is regarding an artist I do post to musicians as well personal tweets.* **GM1:** *I like doing that [sharing], it is important to me because I love music in any way, before Twitter came around I was always talking about music and chatting about music if everybody has the styles I like, you know not everybody does, so. I do like to share it is important for me, music will always be important to me so.* **GM2:** *The odd time I would mention someone at the end of a tweet so that everyone sees the tweet but the person I am mentioning gets a kind of an extra notification like, like a 'I want you to see this, I want you to come with me' maybe or something like that.* **GM4:** *I listen to a lot of music on YouTube and normally actually when I post a track it's normally a YouTube link because anybody can access that so it's something you can post if they are interested in listening to it you are guaranteed they will be able to hear it.* **GM4:** *I don't really know, I just find it interesting I guess if some people find it interesting that's cool I don't feel, if I didn't do it I would miss it you know what I mean. It's just a part of the whole thing isn't it? It's just, everyone takes a bit and gives a bit, you know some people find that interesting.* **GM5:** *Sure it's a bit of fun like [sharing music], you know, at least you kind of get a half a bond anyway with people when you are talking about music or something, there's something personal about it you know.* **GM6:** *I mean sometimes it's a matter of sharing something that I have discovered that's new that I find interesting, that I would know a certain percentage of my followers are likely to find interesting as well.* **GM6:** *There are times when I do quite mischievously put up stuff that is utterly utterly unlistenable, which is also me again parodying, I remember once posting – a few of my friends were once having a discussion about was there a difference between noise and music and I put up a piece . . . I think it's probably [Shostakovich] which is a totally unlistenable piece – this piano which is a completely insane time signature and it is quite possibly painful to listen to, but that is kind of done with a slightly raised eyebrow. In that people who know me will know that he's yanking my*	**BK1:** *I like sharing music. It's important for people to share music. It builds relationships with people.* **BK1:** *Facebook is good because it allows you to interact with your friends, and with a music blog, a music site, or a shop and they can post and give you ideas for new music, and you can give your friends new music. So it's a good way of finding new music because you're interacting with people that you have the same or similar tastes with.* **BK2***: I do think that it's a way of communicating, kind of almost a way for conversation, for example if I put up a video that I like I do get satisfaction out of the fact that maybe other people might watch it and comment and say 'oh wow that's really cool' etc. I think that is important because it's just interaction with people and if you weren't doing that on Facebook, if you were just blindly staring at things and not interacting then I would say it's kind of an unhealthy thing to do, whereas, at least it is a form of communication even though it is somewhat a strange one from normal day-to-day meetings.* **BK3**: *If someone has no interest in music then I have absolutely no interest in suggesting bands to them. But if someone is interested…yeah definitely I've shared lots of different kinds of bands and singers with different people.* **BK4:** *It is actually why I use Facebook most of the time is for sharing music. Generally it might be a link directly to where there album would be, like a Bandcamp or a SoundCloud, 'you can listen to it here,' or I might have – you can tell if you are on a page on another website and you like it you know it will come up on your feed and people will like it so generally I do that just to say this is really good!* **PR2:** *It is a mix of everything, when I started off first it was just pretty much, a post could be 'this is a great band, this is the reason I think they are great' stick a YouTube video on it, or a couple of YouTube videos, links to the website and stuff.* **PR2:** *The great thing I suppose with social networks is that I am from Wexford and I have a big group of friends, who still live in Wexford and the whole blog came about was I wanted to share music with them like it wasn't for a bigger audience or anything like that and social network has kind of kept me in touch with them through Facebook and Twitter and the blog so, I suppose intertwined yeah but it all started off as personal I suppose.* **PR2:** *It is kind of nice it's like a kind of an informal way of starting a discussion sometimes, you know if you put up… like usually I'd be like aw this band are really brilliant right now and you stick up a link and someone will comment and from the personal side of things like a friend is always usually going to comment on it and they may even call it crap but you know and then you are telling them why it is not crap…I think if you are going to be on these social network things you kind of need to use it really you know, there is no point just being logged in and not doing anything, just don't have*

chain to a degree. I think really what I do share it's kind of is a part of that performance of this slightly eccentric artist who occasionally gets his activity reported on Twitter and yeah my persona really is of a slightly eccentric conceptual artist.	*one if your… you need to interact because I do find they only become reasonably interesting after you've been on it awhile, and liked a certain amount and become friends with a certain amount of people and so I think you need to keep interacting to get any sort of good out of it in the first place.* **PR3:** *If I've recorded a mix at home, I'll upload it to my SoundCloud account, which is linked with Facebook, so as soon as it hits SoundCloud it gets posted publicly on Facebook, and again like it's there for people to listen to if they want to they can, if they don't, they don't need to, but again, with, on the flip side of me following the lads and listening to what their playing, they're doing the same to me and commenting on what I'm doing and kind of if it's shit they'll tell me and if they think I should try something different, they'll tell me the same as I'd say it to them.* **PR5:** *Just my friends on Facebook. Usually I don't put any writing in the status update just the link to a track. But sometimes I will put up you know a few lines about it, try and spark something and see what people have to say about it.* **PR5:** *Out of about 400 friends I'd say, maybe like I put 20 of them aside and I've probably put more tracks up than all of my friends put together since I have been on it you know. Like I mean I put up, like sometimes when I log in I just go on and post tracks just…* **PR6:** *I'd share a bit like I would post up songs regularly enough, every couple of days, I think I use it like you know Facebook, if you post a link, an external link your comment is more likely to be seen so I would use that, if I am saying something that I kind of want people to see it, I'll make sure that I post a link to a song with it, so I'd use that a lot.*
Sharing live gigs and events (recruiters)	
Sharing upcoming gigs and events	
AP5: *I have used Twitter to talk about concert updates and find out who wanted to come to a concert with me.* **GM2:** *The main thing music-related I would share would be a gig if there is a gig in Cork, any gig I think people should go to I would tweet about and I use an app called Songkick for that…this company is based in America, they've a database of every artist in the world and you add, you follow artists and they have got every venue in Ireland, and I mean down to Cyprus Avenue like, it's in there. And if your artist is coming to Ireland you get a notification. So like the other day I got a notification, Muse are coming to Dublin and then you can say 'I'm going', or 'I'm maybe going', and share it to Facebook or Twitter, which is great. The 'I'm maybe going' is really good as well, cause some people, you want to tell people about it but you don't want to confirm that you are going like so they say, I might go to this, tell people about it anyway. So I am tracking all my gigs with that now.*	**BK3***: If there are upcoming events that relate to music that they might like, I like to do that. But if it is someone who isn't particularly interested in music than obviously I wouldn't bother.* **BK6:** *I might start a conversation if I shared it with one person in particular. Say If I wanted to go to a gig and I got a YouTube link of the band that I was going to see and put them on someone's page and go 'Listen to them, they're class, we should go' kind of a thing. But in general I wouldn't, I'd just put it up.* **PR1:** *I guess the only time really is if you're doing something you generally check-in somewhere and post that you are doing something. If I'm going to gigs I like to say who I'm going to and also add a video of the band that I'm going to.* **PR1:** *In Boston there is a group of us who like going to live shows. I know that they like going to gigs and they know that I like going to gigs. So if there is a band coming up that they might not have heard of I'll email them about it and tell them and send them a video link. They will do the same for me. That does not necessarily mean that I will like them or that I will be*

GM2: *If there is someone good that I have come across and they are coming to the Triskel or something like, I would try and get as many people as I can to go like…but like cause up to a few years ago like I mean all the newspapers, like the examiner, the echo will have, or the whazon like you know, like what the hell does that tell you like, like I went to a gig last year a girl called Agnes Obel - I'd say it was around then I started getting really into - cause that gig surprised me, how good it was, and then I, that was when I really started getting into keeping an eye on gigs, cause this is going on right here, but you see it in the newspaper and I don't know do people act on it like, it's not interactive enough whereas if like the editor of the examiner was on Twitter saying 'this artist is coming this weekend' and has a video attached now all of a sudden you can say I think I'd like to go to that you know.* **GM2:** *I suppose that it was I would be doing on Twitter, saying 'why sit at home and watch Coronation street and Eastenders again tonight. Go out, there is something on in Cork, its ten minutes out the road.'* **GM2:** *I would do more stuff connected to a gig rather than just randomly, just sharing a song to people to listen to. I like there to be a follow up to it like if I'm sharing cause then I think someone's gotten a benefit out of what I have tweeted, here's a video and you can actually see them tomorrow night as well if you want like… and I love when I read tweets like that, someone saying 'The amazing Agnes Obel is playing tomorrow in Cyprus Avenue' and a video with it like if I was to say how to rate a good tweet that'd be it like. You know and even like a link to the tickets page, you know that's it's all tied in together. But like you'd nearly want to be training people how to write tweets like that like when, if you are using it all the time it's grand it's easy but like…but like my mother wouldn't know how to, like she would probably ring my Aunt now and say there is a concert on instead of, she's not going to tweet about it like.*	*willing to go to the gig.* **PR4:** *And events, like this band are playing can't wait whatever you know.*
Sharing promotional material (promoters)	
Sharing promotional material (music content/live events/updates)	
GM6: *Aside from my own production in terms of writing and art which I do promote through Twitter and Tumblr and Pinterest depending on where it is relevant.*	**BK2***: Well apart from just putting up videos and stuff like that I think creating an event is something that I have done before when I have been putting on a gig. I put on a gig once, maybe two years ago now, but I created a Facebook event and sent out invites to everyone and all that.* **BK4***: Because I work for a website called "We Are Noise" (wearenoise.com) I try to link their posts on to my page and constantly kind of feed that back in and also if I see a local artist doing well I try to put it on my Facebook and be like this guy is class his album is streaming here you should listen that's actually what I use Facebook the most for, is links, I put links up, that's all I really do and I might only do one status a week or*

	something but I generally would have a lot of links and just try to share things. **BK4:** *Only the other a day - a local artist called Bantum - I realised his album was streaming on Nialler9 and a friend of mine features on it so I put the link up and I said 'this is really good', but I generally do that a lot.* **BK5:** *But we run a lot of events in the Triskel as well and generally it's good to keep people coming into the centre, for the café, for the twisted celluloid, and for the Triskel in general because you know it's a nice space.* **BK5:** *We post up lists on Facebook a lot and that works. We put a YouTube clip or some audio and that helps vastly as well, that's really good.* **PR2:** *OK Facebook a simple like thing, it goes up on your feed as far as I know, G*** or the G**** blog has logged or liked, and that works both ways because I now like stuff as me and as the blog, I try to keep them separate in some ways cause… but then just posting links and things like that up.* **PR2:** *Well I would just post things on, that I have put on the blog, I would go on to Facebook and stick it on the page and say this link is up so that takes 15 seconds. You can set it up that way [to auto share on Twitter], because it kind of, the formatting is not great, so I usually do it on Twitter and then I put it on Facebook as well. A lot of people have it set up so that they put it on their blog and it automatically goes to Twitter; automatically goes to Facebook. But I'm a bit more anal about it because…it might have half the heading cut off. So, I purposely put stuff on Twitter because on Twitter if you automatically let it post on the blog it'll just stick up the text. But what I do is, I link to stuff on Twitter – because you know you can put up someone's name. Just say I wrote a blog about…the low anthem are a band that I am in to – I will put like "Blog on the Low Anthem" and the Low Anthem name will be the link to the Low Anthem page, because then the Low Anthem can see that I put that up, or fans of the low anthem. And then on Facebook, instead of letting that just go automatically up to Facebook, you can tag bands and people on Facebook, so, it's a slightly longer process but you have more people seeing what you have posted…because, like bands can have it set up that if I tag them it appears on their home page, so if it appears on their – like if I do an interview with a band, an international band, and you know I have…3 or 4 hundred likes on my Facebook page, which is grand, but if I tag that band and it appears on their page, where they have got 30 thousand likes…you have increased the amount of people that will see it.* **PR2:** *But then, it kind of turned into reviews, and interview was kind of the big part of the blog which I prefer, just interviewing the band and posting the interview up.* **PR2:** *And I have got things like playlists of the day where you can do a playlist in YouTube these days and it's like 10 videos of bands that I like. And that can be embedded in the blog so linking again to another social network site I suppose. I'll do a thing like podcasts every now and then where I just mash a load of songs together, stick it up. A thing that has popped up over*

	the last 6 months which has been great, is exclusive kind of listens, like hope is noise, trumpets of Jericho, and slow motion heroes recently, I have been in contact with their kind of record companies or them themselves and got their CDs a month before they come out and put them up on - oh SoundCloud is another one I am on, and Bandcamp actually - so I put it up on SoundCloud where people are not able to embed it in their own sites, or download or anything like that but it's on my site and the only way you can listen to the new album is on my site, so it works both ways, where their fans are coming to my blog where they haven't before, and everyone that is on my blog gets to listen to it and stuff like. That's the fun part. **PR4:** *Generally it would be a YouTube link or a Facebook event page maybe our new album is coming out on the 15th of blah preorder it here, I would do that. When I buy something on Bandcamp or even download it you can usually click tell your Facebook followers that you have done that, I would do that.* **PR5:** *I use the events a lot for gigs and stuff like I play in here [Gulpd] so I put up the gigs. Anytime I am playing I share it and stuff like that. I think it is a good way, and a cheap and easy way to promote stuff.* **PR6:** *I recorded a mix myself on Tuesday night and I posted that on Facebook last night. So I recorded a mix and uploaded it to SoundCloud and I posted it on my own feed and I have got a gig this weekend so I posted it on the event page for that gig as well.* **PR6:** *I suppose it has definitely become, like, I only started DJing out or playing out in pubs and bars and stuff last year so I think its def – my usage of it has definitely changed since then because I have to – I don't have to – but I use it more to promote myself. I'd post more music, post more mixes, post more gigs, gigs that I am going to go to or gigs that people should check out I kind of do that, I try and promote myself a bit more and try and promote these other gigs a bit more. I think I use it more for music now than I did a couple of years ago I suppose. I probably wouldn't have posted as much music a couple of years ago, I would have just used it for kind of staying in contact with friends, but yeah I would definitely use it more for music now.*

Appendix C-9 Chains of Evidence: Affordance G

Table C-9.1: CHAINS OF EVIDENCE FOR AFFORDANCE G	
Twitter	**Facebook**
Sharing internal content (propagators)	
Sharing internal content (retweeting/share post)	
AP3: *I have friends and family who claim to respect my tastes, but by retweeting I also create a 'diary' for myself so I can go back and see what I've forgotten I was listening to.* **AP3:** *Mostly ReTweets.* **AP5:** *Not specifically, but I retweet a lot. Then anything new, I don't, I can't recall a time when I have posted anything new.* **GM1:** *Retweeting in Twitter I think is a great way of showing other people what's in there.* **GM1:** *I would yeah [get replies from musicians]. Not always, not all the ones you follow you never get but you get retweets, you get posts you get even followed sometimes…I have a few that I even became friends with.* **GM5:** *I would probably take external links most of the time, but yeah I would retweet, if I click something and liked it I would retweet it.*	**PR2:** *Anyone that retweets, that's following me, that goes to all their friends and if it's a band that retweets, it's the same as Facebook, all their fans get to see it. So that's happened a few times like. I did a review of Ryan Adams in was it Ryan Adams? In the Olympia? Or the Opera House, I can't remember which one now, no it was in the Olympia I saw him and it went a bit mad, because I was the first to kind of to do a review, and it wasn't a great review or anything like that, because I wrote it really late at night but the Olympia, I tagged the Olympia and the Olympia stuck it up on their official web page so that it got to all their 30 thousand followers or whatever, and they were retweeting it and I think it was the record label or something retweeted it, so you had it like spinning around like mad and there was like thousands and thousands of people read the review. The good aspects of it.* **PR2:** *That new share option as well you can send things on so, like A***** in P**** does it a lot you know, you and then you just see like 15 people have shared it, so it's, it's like wildfire really* **PR2:** *Sharing like we were talking about like you see someone else's link that you like and you share that, the tagging thing.* **PR5:** *I'd probably reshare not my friends more the bands or you know the blogs that I follow, I reshare their stuff but not really other people's post.*

Appendix C-10 Case Comparison of Affordance Prevalence

This section presents a comparison of the affordance prevalence across the two case sites: Twitter and Facebook and across the four case groups: both musician-specific groups (Bjork and Amanda Palmer) and both general music groups (Plugd Records and Guardian Music). It is also examines the findings in the context of the user classifications from the active and passive user types for music consumption intensity and SNS use intensity.

In order to understand the analysis of the affordance prevalence, first the sum of the users who discussed each affordance is presented in Table C-10.1 and the percentage of users for which the affordance was evident is calculated.

Table C-10.1: AFFORDANCE PREVALENCE ACROSS ALL RESPONDENTS		
Affordance	**No. of Users**	**% of Total Users** (24 users)
ACTIVE SEEKING		
Affordance A: Connection Search & Follow	18	**75%**
Affordance B: Connection Search & Explore	13	**54%**
Affordance C: Search Key Terms	7	**29%**
PASSIVE ENCOUNTERING		
Affordance D: Browse Activity Feed & Discover	23	**96%**
Affordance E: Direct Connection Interaction	15	**63%**
CONTENT SHARING		
Affordance F: Creating & Sharing Content	21	**88%**
Affordance G: Sharing Internal Content	6	**25%**

To illustrate this comparison, specifically for the active seeking affordances, the emphasis is on Affordance A (connection search and follow), with 75% of the user displaying these behaviours. This is in contrast with 54% of users searching connections and exploring the resulting pages (Affordance B) and 29% of users searching for key terms (Affordance C) – which can explained by the constraints discussed in previous sections for the active seeking affordance, particularly in the Facebook case site. The most prevalent affordance is Affordance D (browsing the activity feed and discovering content) with 96% of all users engaging in this activity with direct interactions (Affordance E) displayed by 63% of the users. Content sharing behaviours also varied with the number of users creating and sharing content from external sources (Affordance F), which was displayed by 88% of users versus 25% of users mentioning sharing internal content (Affordance G).

The following section uses these figures to compare the calculations across the case sites, the case groups, and across the various user types.

Affordance Prevalence: Case Site Comparison

This section presents a comparison between the two case sites: Facebook and Twitter (see Appendix C-12 for analysis tables). Table C-10.2 displays these comparisons in relation to each of the affordances. As evidenced in the display above Affordance A, D, F were almost equally distributed between Facebook and Twitter. The prevalence of such activities like connecting with users, browsing the timeline, and creating and sharing content was shared between the sites. In contrast, "connection search and

explore" was more evident in Facebook than in Twitter, as many Facebook users mentioned browsing profile pages to discover content. In contrast 'searching for key terms' in Twitter represented the majority of mentions by users, as it is not afforded by Facebook.

Table C-10.2: AFFORDANCE PREVALENCE ACROSS CASE SITES		
Affordance	**SNS**	
	Facebook	**Twitter**
ACTIVE SEEKING		
Affordance A: Connection Search & Follow	**50%**	**50%**
Affordance B: Connection Search & Explore	**77%**	**46%**
Affordance C: Search Key Terms	**0%**	**100%**
PASSIVE ENCOUNTERING		
Affordance D: Browse Activity Feed & Discover	**52%**	**48%**
Affordance E: Directed Connection Interaction	**67%**	**33%**
CONTENT SHARING		
Affordance F: Creating & Sharing Content	**57%**	**43%**
Affordance G: Sharing Internal Content	**33%**	**67%**

'Directed connection interactions' were also predominantly mentioned by Facebook users and may be as a result of the ability to post on others users profile pages, not afforded by Twitter, which only enables posts to be directed in a conversational context. It is also interesting to note that sharing internal content was predominantly evident in Twitter. 'Sharing internal content' (or retweeting) has been more effectively perceived by Twitter users than the sharing mechanism in Facebook, possibly illustrating the effectiveness of Twitter for information propagation in a network.

Affordance Prevalence: Case Group Comparison

This section presents a comparison between the two case groups: the general music group and the musician-specific group (see Appendix C-12 for analysis tables). Table C-10.3 displays these comparisons in relation to each of the affordances. Like the comparison of the case sites, some affordances were almost equally distributed across the two groups, such as in the case of Affordance D and E. However, where differences occur most significantly is in Affordance B, C, and G. The general music group engaged in actively 'searching for key terms' more predominantly (71%) than the musician-specific group. Where this occurs it may be as a result of active versus

passive user types, where active user types were more heavily represented in the general music groups.

Table C-10.3: AFFORDANCE PREVALENCE ACROSS CASE GROUPS		
Affordance	**Case Group**	
	General	**Musician**
ACTIVE SEEKING		
Affordance A: Connection Search & Follow	**44%**	**56%**
Affordance B: Connection Search & Explore	**46%**	**77%**
Affordance C: Search Key Terms	**71%**	**29%**
PASSIVE ENCOUNTERING		
Affordance D: Browse Activity Feed & Discover	**52%**	**48%**
Affordance E: Direct Connection Interactions	**53%**	**47%**
CONTENT SHARING		
Affordance F: Creating & Sharing Content	**57%**	**43%**
Affordance G: Sharing Internal Content	**67%**	**33%**

Likewise, 'sharing internal content' was more predominant in the general music group (with 67%). Again, this may be explained by the fact that active music consumers and active SNS users were most likely to display sharing behaviours (outlined in the next section). In contrast, connection search and explore was more predominant in the musician-specific group (with 77%). The following section outlines the comparison across the user classifications, which may spread more light on the difference between the case sites and the case groups.

Affordance Prevalence: User Type Comparison

This section presents a comparison between the active and passive user classification to illustrate the differences that may have occurred between the two case sites and the two case groups as a result of the different types of users within each (see Appendix C-13 for analysis tables and Appendix C-10 for comparisons within user types). Table C-10.4 displays these comparisons in relation to each of the affordances. In addition, Table C-10.5 shows the dispersion of user types across the case sites and groups. Following are the percentages for each user type:

- The active music/passive SNS group represents 17% of the total users
- The active music/active SNS group represents 54% of the total users
- The passive music/passive SNS group represents 25% of the total users
- The passive music/active SNS group represents 4% of the total users

Table C-10.4: USER TYPES WITHIN EACH CASE					
USER TYPE		CASE SITE		CASE GROUP	
Music	SNS	Twitter	Facebook	General	Musician
Active	Passive	**3**	**1**	**1**	**3**
Active	Active	**5**	**8**	**9**	**4**
Passive	Passive	**3**	**3**	**1**	**5**
Passive	Active	**1**	**0**	**0**	**0**

Differences occurred in Affordance B (connection search and explore) across the case sites, where Facebook displayed 77% prevalence in activity. This may be explained by accounting for the fact that Facebook has the majority of the Active/Active user types (with 61%). However, in disparity, the musician-specific group (which equally displayed 77% prevalence in activity) did not represent the Active/Active user type but instead implicated active music consumers (and not active SNS users) in addition to Facebook as a case site (versus Twitter). The prevalence in "searching for key terms" by 71% of the general music group (in Twitter) can be explained by the Active/Active classification, as these users are the most likely to have engaged in purposeful seeking of music content using the SNS. This activity was evenly dispersed across the other user types. Similarly, the prevalence in "creating and sharing content" by 57% of Facebook users and 57% of the general music group is accounted by the Active/Active classification, which implies these users more likely to engage in sharing behaviours than passive users types.

Finally, sharing internal content was most prevalent in Twitter (67%) and the general music group (67%); implicating the two active music types as opposed to active SNS users. Suggesting that when users discover interesting and relevant content based on their tastes (as with active music consumers), these users want to share their discoveries with others. This may be as a result of wanting to share their tastes and opinions to express their identity, while the passive music consumers were less interested in propagating discoveries, as they were less engaged with music content in general. For sharing content in general, it is the combination of being both actively engaged in SNS use and actively engaged in music consumption that is most likely to motivate music sharing behaviours. However, as a result of uneven distribution across the user types, further research is required to confirm these findings as they are not representative of a large user comparison.

Table C-10.5: OVERVIEW OF AFFORDANCE PREVALENCE										
Affordance	**No. of Users in Evidence**	**% of Total Users** (24 users)	**Active Music Passive SNS** (4 users)	**Active Music Active SNS** (13 users)	**Passive Music Passive SNS** (6 users)	**Passive Music Active SNS** (1 user)	**SNS Comparison**		**Group Comparison**	
							Facebook	**Twitter**	**General**	**Musician**
ACTIVE SEEKING										
Affordance A: Connection Search & Follow	**18**	**75%**	**17%**	**61%**	**22%**	**0%**	**50%**	**50%**	**44%**	**56%**
Affordance B: Connection Search & Explore	**13**	**54%**	**23%**	**62%**	**15%**	**0%**	**77%**	**46%**	**46%**	**77%**
Affordance C: Search Key Terms	**7**	**29%**	**14%**	**57%**	**14%**	**14%**	**0%**	**100%**	**71%**	**29%**
PASSIVE ENCOUNTERING										
Affordance D: Browse Activity Feed & Discover Content	**23**	**96%**	**13%**	**57%**	**26%**	**4%**	**52%**	**48%**	**52%**	**48%**
Affordance E: Directed Connection Interaction	**15**	**63%**	**13%**	**67%**	**20%**	**7%**	**67%**	**33%**	**53%**	**47%**
CONTENT SHARING										
Affordance F: Creating & Sharing Content	**21**	**88%**	**10%**	**57%**	**14%**	**5%**	**57%**	**43%**	**57%**	**43%**
Affordance G: Sharing Internal Content	**6**	**25%**	**33%**	**33%**	**17%**	**17%**	**33%**	**67%**	**67%**	**33%**

Appendix C-11 Activity Prevalence within each User Classification

Table C-11.1: ACTIVITY PREVALENCE WITHIN EACH USER CLASSIFICATION								
User Type	Music	SNS	Music	SNS	Music	SNS	Music	SNS
	Active	***Passive***	***Active***	***Active***	***Passive***	***Passive***	***Passive***	***Active***
	(4 users)		(13 users)		(6 users)		(1 user)	
ACTIVE SEEKING								
Affordance A	**75%**		**85%**		**67%**		**0%**	
Affordance B	**75%**		**62%**		**33%**		**0%**	
Affordance C	**25%**		**31%**		**17%**		**100%**	
PASSIVE ENCOUNTERING								
Affordance D	**75%**		**100%**		**100%**		**100%**	
Affordance E	**25%**		**77%**		**50%**		**100%**	
CONTENT SHARING								
Affordance F	**50%**		**92%**		**50%**		**100%**	
Affordance G	**50%**		**15%**		**17%**		**100%**	

Appendix C-12 Analysis of Affordance Prevalence across Case Sites and Groups

Table C-12.1: ANALYSIS OF AFFORDANCE PREVALENCE ACROSS CASE SITES AND CASE GROUPS									
Affordances	**Facebook**		**Twitter**		**% of Total Users**	**SNS Comparison**		**Group Comparison**	
	BK	**PR**	**AP**	**GM**		**Facebook**	**Twitter**	**General**	**Musician**
ACTIVE SEEKING						**Based on % of Total Users**			
Affordance A: Connection Search & Follow	[1|2|3|4|5|6]	[4|5|6]	[1|4|5|6]	[1|2|3|4|6]	**75%**	9/18	9/18	8/18	10/18
	6	**3**	**4**	**5**		**50%**	**50%**	**44%**	**56%**
	100%	50%	67%	83%					
Affordance B: Connection Search & Explore	[1|3|5|6]	[2|3|4|5]	[3|4|6]	[2|3]	**54%**	10/16	6/16	6/16	10/16
	6	**4**	**4**	**2**		**77%**	**46%**	**46%**	**77%**
	100%	67%	67%	33%					
Affordance C: Search Key Terms	[-]	[-]	[1|6]	[1|2|3|5|6]	**29%**	0/7	7/7	5/7	2/7
	0	**0**	**2**	**5**		**0%**	**100%**	**71%**	**29%**
	0%	0%	33%	83%					
PASSIVE ENCOUNTERING									
Affordance D: Browse Activity Feed & Discover	[1|2|3|4|5|6]	[1|2|3|4|5|6]	[1|3|4|5|6]	[1|2|3|4|5|6]	**96%**	12/23	11/23	12/23	11/23
	6	**6**	**5**	**6**		**52%**	**48%**	**52%**	**48%**
	100%	100%	83%	100%					
Affordance E: Direct Connection Interaction	[1|2|3|4|5|6]	[2|4|5|6]	[2]	[2|4|5|6]	**63%**	10/23	5/23	8/23	7/23
	6	**4**	**1**	**4**		**67%**	**33%**	**53%**	**47%**
	100%	67%	17%	67%					
CONTENT SHARING									
Affordance F: Creating and Sharing Content	[1|2|3|4|5|6]	[1|2|3|4|5|6]	[1|5|6]	[1|2|3|4|5|6]	**88%**	12/21	9/21	12/21	9/21
	6	**6**	**3**	**6**		**57%**	**43%**	**57%**	**43%**
	100%	100%	50%	100%					
Affordance G: Sharing Internal Content	[-]	[2|5]	[3|5]	[1|5]	**25%**	2/6	4/6	4/6	2/6
	0	**2**	**2**	**2**		**33%**	**67%**	**67%**	**33%**
	0%	33%	33%	33%					

Appendix C-13 Analysis of Affordance Prevalence across User Types

Table C-13.1: ANALYSIS OF AFFORDANCE PREVALENCE ACROSS USER TYPES										
Affordance	**No. of Users**	**% of Total Users (24 users)**	**Active Music Passive SNS (4 users)**		**Active Music Active SNS (13 users)**		**Passive Music Passive SNS (6 users)**		**Passive Music Active SNS (1 user)**	
			Group	All	Group	All	Group	All	Group	All
ACTIVE SEEKING										
A: Connection Search & Follow	**18**	**75%**	3 75%	**17%**	11 85%	**61%**	4 67%	**22%**	0	**0%**
B: Connection Search & Explore	**13**	**54%**	3 75%	**23%**	8 62%	**62%**	2 33%	**15%**	0	**0%**
C: Search Key Terms	**7**	**29%**	1 25%	**14%**	4 31%	**57%**	1 17%	**14%**	1 100%	**14%**
PASSIVE ENCOUNTERING										
D: Browse Activity Feed & Discover	**23**	**96%**	3 75%	**13%**	13 100%	**57%**	6 100%	**26%**	1 100%	**4%**
E: Direct Interactions	**15**	**63%**	1 25%	**7%**	10 77%	**67%**	3 50%	**20%**	1 100%	**7%**
CONTENT SHARING										
F: Create & Share Content	**21**	**88%**	2 50%	**10%**	12 92%	**57%**	3 50%	**14%**	1 100%	**5%**
G: Share Internal Content	**6**	**25%**	2 50%	**33%**	2 15%	**33%**	1 17%	**17%**	1 100%	**17%**