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Infant

Irish Centre for Fetal and
Neonatal Translational Research

LEANBH Project

Learning to Evaluate Blood
Pressure at Home



Shifting the dial towards
greater success on messy
software projects

IT Architects Conference 2017
15th June 2017
Croke Park Conference Centre, Dublin 9



BioScreen
HEALTH



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The Role of the IT Architect ...

The IT Architect is the organization's
technology strategist

Works with stakeholders to build a holistic view of the organization's strategies, processes, information, and information technology assets

Ensures that technology strategies support business needs

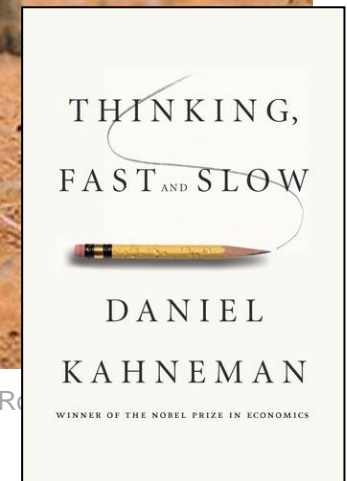
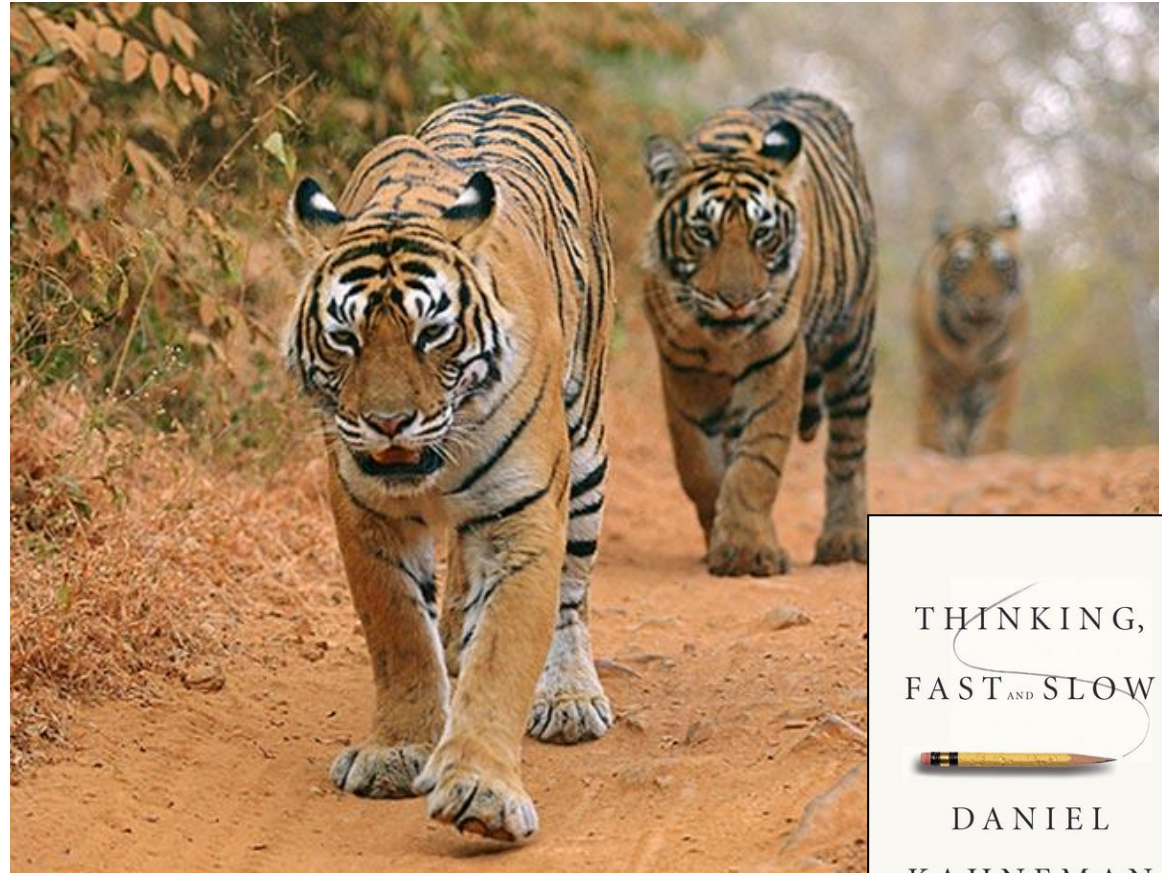
Contextualizes technology projects within the business and the overall technology infrastructure

Helps the business realize bottom-line business value through technology

IT architecture is the art and science of designing and delivering valuable technology strategy.

Wired to survive but ...

Human beings are illogical and irrational. For most of our existence, survival required that we think quickly, not methodically. Making a life-preserving decision was more important than making an accurate one. This has meant that the human brain has developed an array of mental shortcuts.



Source: <http://www.jagdeeprajput.com/Latest%20Large/Approaching-R>

Doing it right but ...



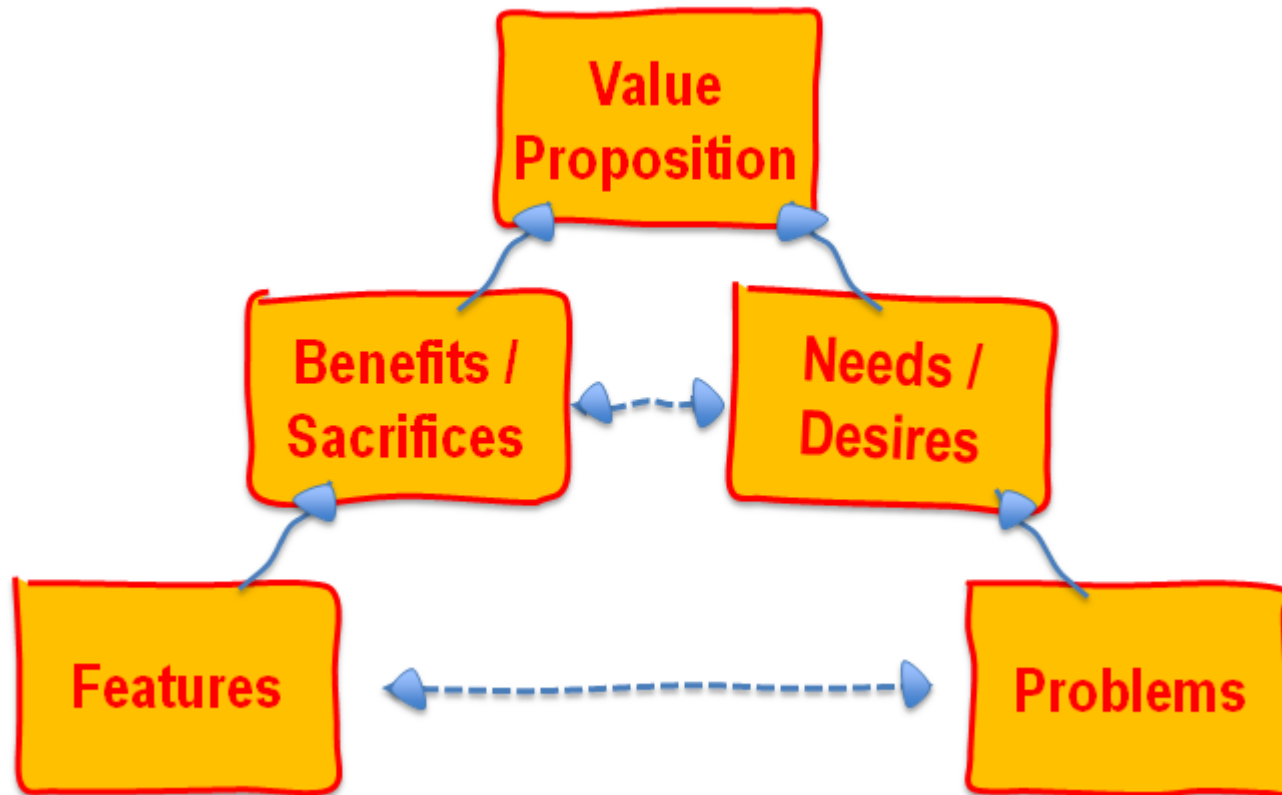
Source: <https://salesbenchmarkindex.com/insights/hit-the-number-with-the-right-balance-of-strategy-and-execution/>

Tools, tools, tools, ...



Source: http://www.toasto.com/?attachment_id=1357

Features-Benefits-Value Triangle



Value for whom?



The IKEA Example



Source: <https://www.pinterest.com/pin/378302437430139076/>

Design is a Wicked Problem ...

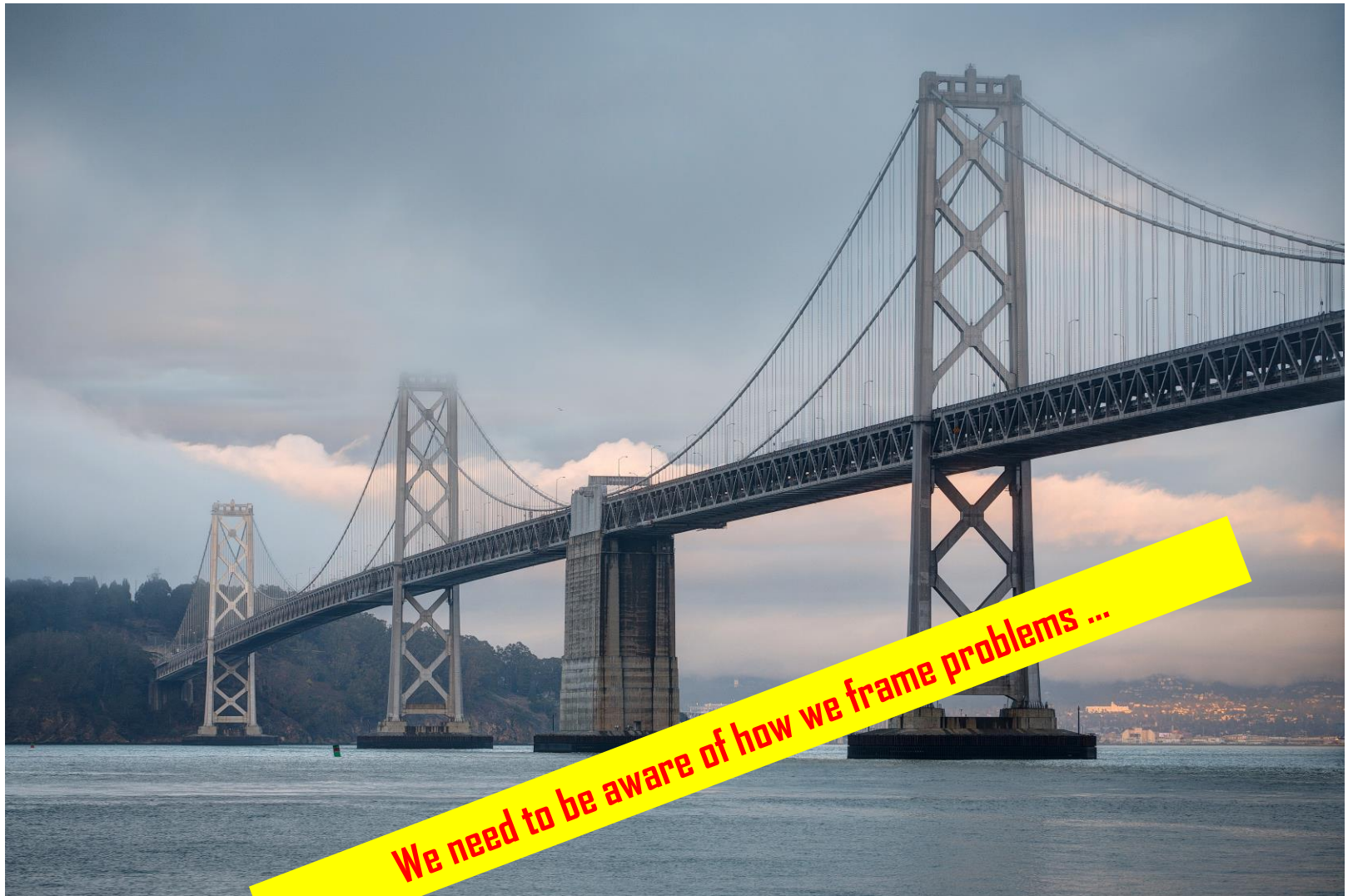


Figure 2 (How to recognize a wicked problem (based upon Rittel and Weber, 1973, 1984))

Some Hard Lessons Learned



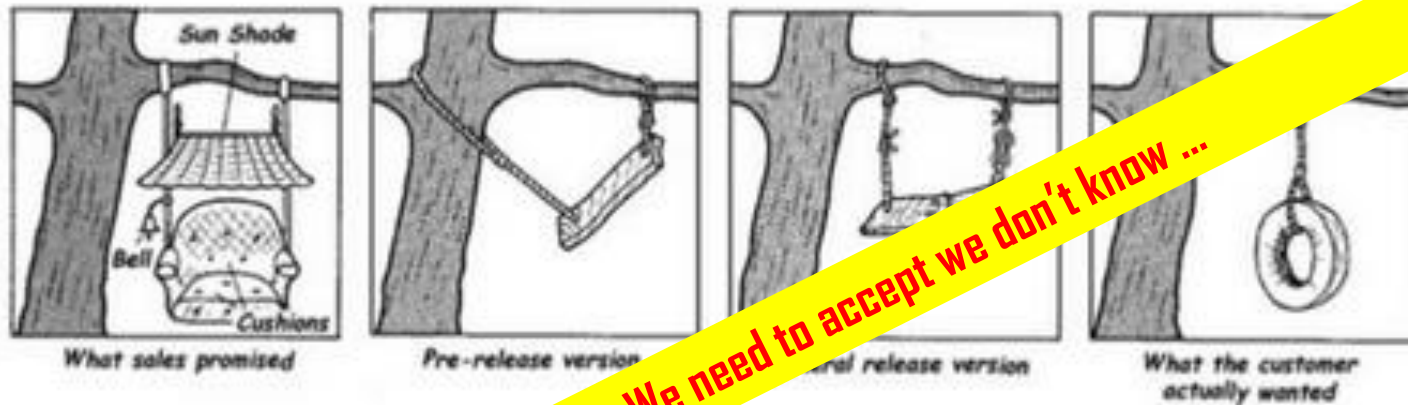
Framing the problem ...



Source: https://upload.wikimedia.org/wikipedia/commons/8/82/Oakland_Bay_Bridge_Western_Part.jpg

Mantle of expertise ...

"My perspective is that the bulk of our industry is organized around the demonstratable myth that we know what we want at the start, and how to get it, and therefore build our process assuming that we will take an optimal, direct path to get there. Nonsense. The process must reflect that we don't know and acknowledge that the sooner we make errors and detect and fix them, the less (not more) the cost." (Bill Buxton)



Falling into the Product Trap ...



Source: <http://2.imimg.com/data2/RX/XX/MY-4291542/oxygen-mask-250x250.jpg>



We need to solve problems rather than create products ...

Source: <http://www.youtube.com/watch?v=jmpOToLAP18>

A quick case study ...



Transforming healthcare for children and their families: Doug Dietz at TEDxSanJoseCA 2012

TEDx TEDx Talks
Subscribe 5,536,094

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“Empathy at the beginning is the heartbeat of the project as you begin to move forward”

Source: <https://www.youtube.com/watch?v=jajduxPD6H4>

Building empathy ...

THREE PREGNANT DADS

FROM THE BOOK OF EVERYONE

THE HIGHS AND LOWS OF 3 DADS AS THEY TAKE ON THE WEIGHT OF BEING A 9 MONTH PREGNANT MOM FOR ONE MONTH



We need to have empathy for the problems we solve ...

Source: <http://3pregnantdads.com/>

Wants versus Needs

We need to concentrate more on the *needs* of the customers and less on their *wants* ...



We need to differentiate between needs and wants ...

...
Cheaper
Easier
with less damage
for hanging pictures



Voice versus Mind



In other words we need to focus less on the 'voice of the customer' and more on the 'mind of the customer'.

How can we get access to the 'mind of the customer'?



Creating a bias for doing ...



We need to be 'doing' in order to learn and learn early ...

Failing in order to Succeed ...



“Position yourself to fail small in order to Succeed Big ...”

We need to aim to fail rather than Fail

Focusing on points of failure



The jet black swan has arrived at Abbot's Swannery in Dorset and set up home with the resident 600 millionaires, which are all white

We need to zero in on the most likely points of failure ...

Prototype it – but which prototype



Products

Services

Experiences

Value Propositions

Business Models

We need to use the right type of prototype at the right time ...

Behaviour is the real issue ...



We need to accept that behaviour is probably bigger than technology ..

Source: https://s3.amazonaws.com/images-ssl/stock.com/social-issues-drunk-drunkard-drunkenness-disorderliness-social_problems-amrn666_low.jpg

Challenging the status quo



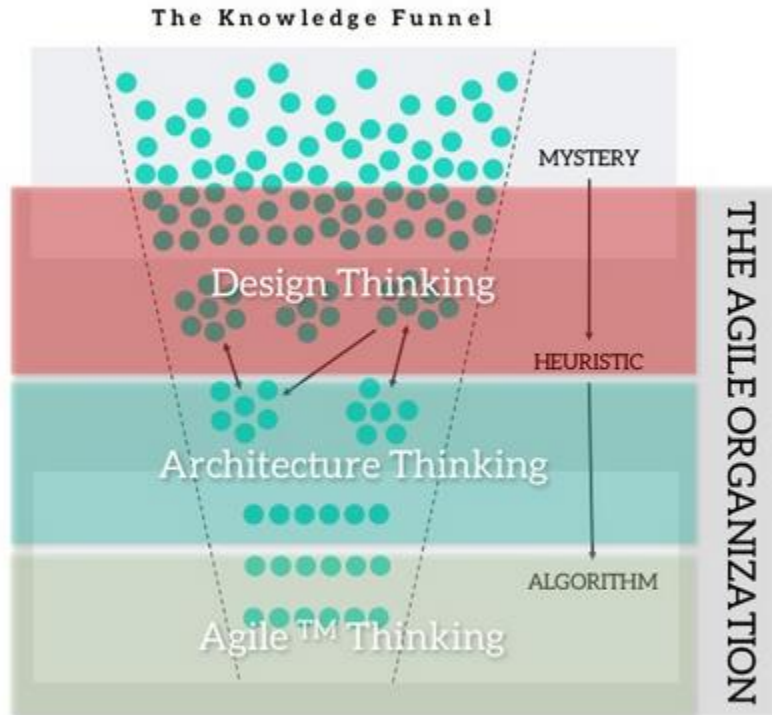
*“Just because things
are the way they are,
doesn’t mean that is
the way they should
be.”*

We need to learn to grab the banana ...

Traversing the funnel ...

A Multi-Disciplinary Journey

HOW ARE PROBLEMS SOLVED?



No single discipline can traverse the funnel, it is a multi-disciplinary journey.

* From Roger Martin (2009) *The Design of Business*

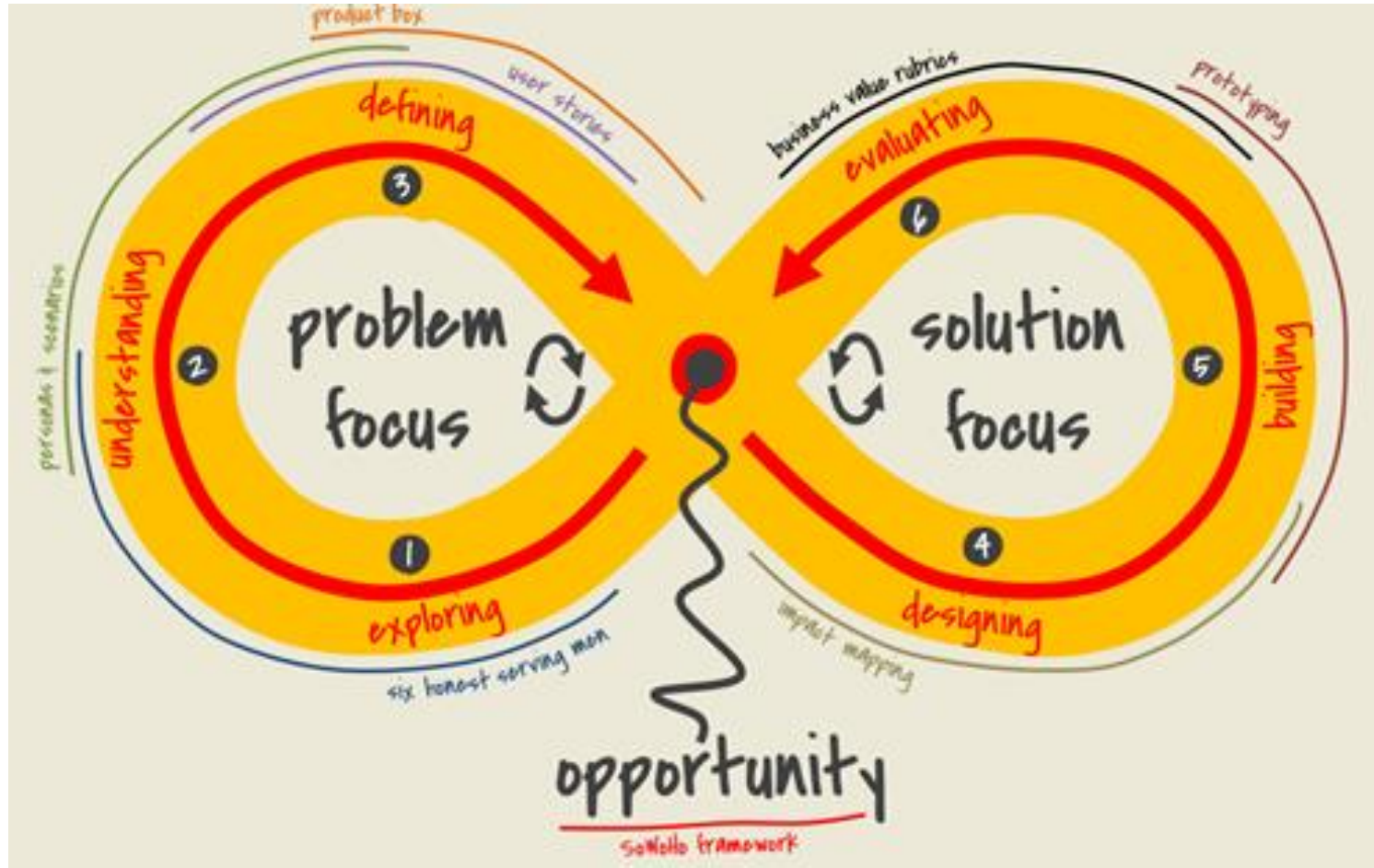


HYBRID THINKING - AN INTRODUCTION | VERSION 1 - IASA

Source: https://www.slideshare.net/craigmartin/hybrid-thinking-the-missing-link?qid=fe4123ce-c7e7-4456-8fc8-c1b66468d456&v=&b=&from_search=1

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A Process for the funnel ...







Source: <http://funnyshit.com.au/img/not-my-job-redux.jpg>

Moving from 'playing not to lose' to 'playing to win'

Doing things right versus doing the right things.

Many Thanks

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