Learning to Innovate

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How?

Creating value through differentiation
Defining innovation

New or Non-trivial changes in product, service, process, business model that create value for a market and payback for an organization
How to?

• Focus on Innovation Processes
Innovation Processes

• Adaptive and structured development processes...

• ...that allow us to innovate in a consistent and predictable ways, but...

• ...designed to mitigate the impact of ambiguity, uncertainty and risk...

• ...through experimentation and learning by failing
3 bad words? 3 good words!

- Three **evils** in operations management:
  - Ambiguity
  - Uncertainty
  - Risk

- that are three **goods** in innovation management...

- ...they are **everywhere**, and we need to **learn how to handle them**
Motivations

- Personal history
- Journey from solving well defined to loosely defined problems
- Empowering ordinary people to achieve extraordinary results
Most people find hard to innovate because...

• ...we got used to be efficient...

• ...we got used to verify that our ideas are good, and we want to prove our ideas work...

• ...we have reinforced an attitude and culture that we have to get it right at once...

• ...and we have convinced ourselves that deviations from what we want are created from mistakes that result from lack of competency
We are programmed to think and act towards doing things in the right way
• Let’s play
What do you **see**?
What do you see?
Basic lessons

We do observe and perceive reality in different ways...

...so (most) people will perceive different things while looking at the same problem or market
What do you see?
Basic lessons

We are programmed to decrease ambiguity and uncertainty...

...so (most) people will take shortcuts and use pre-established mental models.
But…

…the right training and methods can help us rewire ourselves and gain basic core competences
Competences for Innovation

1. Learning to identify sources of innovation

2. Developing Creative Capacity

3. Developing Exploration Capacity

4. Learning to fail as much, as soon, and as cheap as possible

5. Upgrading Execution and Exploitation capacities
A big picture

Innovation Source

Space of Possible Solutions

Space of Feasible Solutions

Innovation
The famous D.Mindset

- Human centered
- Bias towards action
- Show don't tell
- Craft clarity
- Radical collaboration
- Culture of prototyping & experimentation
- Mindful of process
The most popular Design Thinking Process Representation

- **Empathize**: Understand, Observe, Point of View
- **Re-Frame**: Share, Synthesize, Brainstorm, Visualize
- **Explore**: Prototype, Big Idea, Insight
- **Execute**: Test, Sticky Takeaway
Divergence-Convergence Model

Increasing complexity → increasing certainty

- "Seeking" - Initial understanding of problem
- "Solving" - Problem definition: "reframing"

Problem space exploration

Solution space exploration
Analysis-Synthesis Bridge Model

after Dubberly, Evenson & Robinson (2008)
Analysis-Synthesis Bridge Model

Frameworks

Observations

Solutions

Imperatives

After Owen, Kumar (IIT)
Analysis-Synthesis Bridge Model

Frameworks
- Observations
- Solutions

Imperatives
- Problem Selecting
- Solution Selecting

Abstract
- PRINCIPLES
- POINT OF VIEW

Concrete
- OBSERVATIONS
- TESTS

after Owen, Kumar (IDJIT)
Analysis-Synthesis Bridge Model

after Owen, Kumar (IDJIT)
Empathy: Methods Triangulation

Contextual Interviewing

**ASK:** Engagement
What people say they do.

**TRY:** Immersion
What people experience.

**LOOK:** Observations
What people do.

The Right Balance?

Participatory Design

Ethnography
The Dispute over Methods

**MARKET RESEARCH**

- 100 People
- 10 Truths

**INSIGHTS RESEARCH**

- 10 People
- 100 Insights

People say one thing but yet do another

People do not always do what you think they do. People do not always do what you tell them to do. People do not always do what they think they do. People do not always do what they say they do.

Observation and asking why makes you find out what people really do and need.
Sources of Innovation

• What are those things that do not work well enough?
  – What problems do exist?
  – What regulations need to be followed?
  – What opportunities do exist or can be created?

• Why these questions?
From innovation **sources** to challenges

- Identify **sources** of innovation…
- …their **latent needs**, and
- …understand their **potential impact**
The power of observation and immersion

- About 95% of consumption decisions result from unconscious thoughts...
- ...they cannot be articulated...
- ...but they can be discovered through observation and immersion
Creativity

• Is an habit that can be created…

• …through systematic use of methods to perceive reality in different ways…

• …learning to observe…

• …and discovering and systematizing places, moments and practices that makes us more creative

• Each person can learn to be creative…but will respond differently
Generating **Creative Capacity**

- Changing the ways in which we perceive reality (framing)
- Understanding latent needs that are MECE
- **What** do consumers want? and **Why** do they want it?
- Why do consumers **act** like they do?
- What is the best consumer experience/interaction?

...then...how do we **address these need**?
The Knowledge Funnel