System Architecture for Corporate Innovation:
How to Run a Successful Initiative and Deliver Tangible Results

Mona M. Vernon SDM ‘09
Agenda

- Motivation
- Data-driven insights on the strengths and weaknesses of common innovation tools
- System architecture and corporate innovation management
- A few useful tools:
  - lean startup and big data technologies
  - open innovation
- Q&A
Why is corporate innovation a hot topic?

Increased **turbulence** in IT intensive businesses:

Average jump in number of places up and down the rankings from previous year - Top selling firms.

Definition

“Innovation is a response to the historical changes taking place in technology, business and society as we transition from the industrial economy of the past 200 years to an emerging 21st century digital economy. Every business and industry must innovate, that is, adapt to these changes, ward off competitors and not only survive, but try to establish a leadership position by pursuing new market opportunities”

Dr Irving Wladawksy-Berger
About corporate innovation initiatives

“My sense is almost all of them will prove to be wasting time for the company, and they will fail”

Clay Christensen, 2014

Aaron Levie @levie
Big companies are often incapable of getting ahead because everyone’s measured by how well they stay behind.
Decomposition without architecture
Decomposition is a critical choice

Choosing a framework or building an innovation toolbox is performing a decomposition

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Doblin ten types of innovation
Traditional corporate innovation portfolios

Core: 70%
Adjacent: 20%
Transformative: 10%
Traditional Corporate innovation portfolios

Core | Adjacent | Transformative

Investment

70% 20% 10%

Return

10% 20% 70%
An example: the idea jam/fest
"Ideation without execution is worthless. And execution only happens with supportive systems and strategy. Spend time on the real problem!"

Scott Anthony, Innosight Managing Partner
Complexity:
Property of having many interrelated, interconnected or interwoven elements and interfaces
In turbulent times, respond by managing complexity

From: Haydn Shaughnessy
Impact of Systemic Innovation on Resource Allocation Process

Credit: Figure 12.1 Reference 3

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System Architecture
Systemic innovation: a necessary lens

“Innovation architects provide leadership to a systemic innovation by establishing the system architecture, communicating it, and enabling others to support and further develop it”.

Source: Reference 3, Chapter 12
Innovation is sustained when it becomes systemic

Focus + commitment + open

value

pilot
capability

systemic
Why system architecture?

• In systemic innovations, industry leaders frequently play architect roles
• Reducing ambiguity, applying creativity and managing complexity
• Focus
• Goal of the architecture vs. emergence
• Impact of decomposition
Open Innovation
What is open innovation? What it’s not....
Dell’s IdeaStorm – Innovation Success or Failure?
Too much noise, too little value

Since 2007
- 20,462 ideas
- 544 implemented
- 2.6% implementation rate
- 97.4% not implementable, already in the pipeline or “noise”

“The ideas themselves usually weren’t groundbreaking. When asked to recall some of the top ideas generated by the program, Bill Johnston, director of global online community at Dell, cites a partnership with (RED), the charity brand. Another top idea was hiring Cy Jervis, formerly a gadfly in the IdeaStorm community, as community manager for IdeaStorm in February.”
How might do it differently?
Companies discover new solutions from their employees, customers and expert crowds using innovation challenges

Open innovation allows companies to tap into the wisdom of the crowds to solve business problems, unlock value and find break-through innovations

Examples:

- **WOK Challenge** sought ideas and apps built on the WOK API’s around data visualization of author relationships.

- **Legal’s Hunt for Big Data Challenge** sought new open data sources that could be added to existing products or used to create new products.

- **Private Cloud Challenge** seeks novel uses for the Thomson Reuters Cloud recently launched this year.
Dynamic resource allocation: Tapping into solver networks

- Start Ups
- Global Solvers
- Company-Wide Employees
- Universities

Internal Teams

Concentrated

Distributed

Solution Knowledge

Technical Knowledge

Concentrated

Distributed

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Lean start-up
Capturing value from innovation with lean

Innovation is about good decision making in fast-paced environments
References


Thank you

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