

Introduction to Innovation

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Agenda

- Innovation definition
- Innovation process steps
- Two types of innovation
- Three ways to innovate
- Innovation challenges
- Summary

Question

- What is innovation?

Innovation Defined

- Innovation: the introduction of something new. (Merriam-Webster, 2008)
- Innovation – “the effort to create purposeful, focused change in an enterprise’s economic or social potential.”
- “Change that creates a new dimension of performance.” (Peter Drucker, 1991)

Steps of Innovation

Steps to Innovation

- Ideation
- Feasibility
- Discovery
- Prototype
- Testing
- Launch

Step One

■ Ideation

- New knowledge
- Substitute
- Combine/eliminate/change/rearrange
- Solve a problem/correct an incongruity
- Respond to changes (technology, demographics, perceptions)
- Put to a new use
- Duplicate from the past

Step One

Ideation Challenges

- Enabling a constant stream of ideas
- Deciding which ideas to pursue
- Dealing with incomplete knowledge
- Thinking outside the box

Building a better airplane

Step Two

- Feasibility

- Technically possible
- Strategic alignment
- Investment (range – 0's)
- Knowledge/know-how
- Compared to other options

Step Two

Feasibility Challenges

- Does the organization understand its strengths?
- Does the idea play to the organization's strengths?
- Does the organization possess the resources to bring the idea to fruition?
- Best idea; best time?

Step Three

■ Discovery

- Is there a market for this product?
- What is the size of the market?
- Where is the market?
- How homogeneous is the market?
- What are competitors doing in this space?
- How quickly can competitors enter this market?
- Is the market willing to pay for this innovation?

Why does feasibility come before discovery?

Step Four

- Prototype
 - Develop a model
 - Evaluate
 - Refine
 - Proof of concept

Step Five

- Testing
 - Feasibility
 - Marketability
 - Produce-ability
 - Durability
 - Liability

Step Six

- Launch
 - Supply Chain Management
 - Production Process
 - Promotion and Marketing
 - Feedback

Innovation process steps

- Steps go from least costly to most costly
- Organizations must explicitly make a go/no go decision at the end of each step
- Skipping any of these steps significantly increases the risk of failure

Two types of innovation

Two Types of Innovation

- Evolutionary (Gradual) Innovation
 - Focus on needs of existing customers
 - Predictable
 - Manageable
 - Favors the industry leaders
 - Examples?
- Revolutionary (Discontinuous) Innovation
 - Unpredictable
 - Niche focus (new market or underserved market)
 - Favors the newcomers
 - Examples?

Disruptive Innovation

- Clayton Christensen
- Disruptive Innovation
 - Unexpected
 - Non-linear
 - Superior in one aspect
 - Inferior in most marketable aspects
 - High risk → high reward
 - Typically dependent on advances in technology

Disruptive Innovation



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Three methods of innovation

Three key questions

- What value does the product or service produce?
- How and where should the product or service be produced?
- For whom should the product or service be produced?

Three ways to innovate

- Reinvent the value proposition (change the what)
- Redesign the process (change the how or where)
- Redefine the market (change the for whom)

- Example

Health Club - Redefining the WHAT

- Add value for your customer by offering Laundromat services.
 - Drop off suits and work clothes which can be dry cleaned and ready to go after your workout.
 - Dedicate and rent lockers – Leave dirty work out clothes to be cleaned and then hung in your locker for your next visit.

Health Club – Redefining the WHERE/ HOW

- Exercise takes human energy.
 - Hook up exercise equipment to generate electricity.
 - Sell back to power grid.
 - Lower health club utility bill and pass savings to the customer.
 - Earn personal credit for your own utility bill.
 - People can say they're being "green".

Health Club - Redefining the WHO

- Cater to dog lovers.
 - 45-65 million dog owners in the US.
 - Pet owners spent \$23 Billion in 2007.
 - Owners can be very dedicated to their pets.
 - Dog sitting, walking, hotels, spa, health insurance.
- Start a dog health club membership.
 - Play in groups, swim in the pool, take for walks.
 - Dedicate a jogging track to dog owners.

Innovation challenges

Innovation Challenges

- Error of commission/error of omission
- Correct vision/poor timing
- New, newer, newest technologies
- Technology predictable; people unpredictable
- Infrastructure dependency
 - “A new discovery is seldom fully effective for practical purposes till many minor improvements and subsidiary discoveries have gathered themselves around it” Alfred Marshall, 1890
- First to market/Costs to copy

Innovation Challenges

- Costs of non-participation
 - Lose first to market advantage
 - Risk erosion of existing business
- Costs of participation
 - Cannibalize existing business
 - Difficulty to justify R&D
 - Core business focus interruption

Summary

Innovative Companies

- A company must engage in both evolutionary innovation and revolutionary innovation
- A process must be in place to encourage a constant stream of ideas
- A process must be in place to filter ideas
- Go/No Go gates must be set up at each step of the innovation process
- A company must watch for potential disruptive innovators in their market
- A company must innovate to survive

Questions?

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