MBA 8220: Innovating Business Processes

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Agenda
- Innovation
- Process innovation
- Case discussion
- Project
The Information Systems Strategy Triangle

Manager in the coordinating role

Business Strategy

Organizational Design

Information Strategy

Topic one

Innovation
What is innovation?

Dictionary-style ...
- The act or process of inventing or introducing something new
- Something newly invented or a new way of doing things
- The process of adopting a new thing, idea, or behavior pattern into a culture
- The act of starting something for the first time; introducing something new

Authors on innovation ...
- Leifer, et.al. (Radical Innovation, HBP, 2000)
  - Producing an outcome with:
    - An entirely new set of performance features
    - Improvements in known performance of 5x or greater
    - A significant (30% reduction) in cycle-time and/or cost
- James March
  - Exploration vs. Exploitation
- Yours? ...

Who is innovating?

“Midlevel managers play a crucial role in every company’s innovation process, as they shepherd partially formed ideas into fully fledged business plans in an effort to win funding from senior management.

It is the midlevel managers that decide which ideas ... they support and carry to senior management”

From C. Christensen: The Innovator’s Solution, HBP, 2004
What types of innovation?

**Sustaining innovation (exploitation):**
Successful companies are good at responding to *evolutionary* changes in their markets
- Makes a product or service perform better in ways that mainstream customers already value
- Typically developed and introduced by industry leaders

**Disruptive innovation (exploration):**
Where they run into trouble is in handling *revolutionary* changes in their markets
- Creates entirely new market by introducing a new product or service that mainstream customers initially sees as worse
- No company has a routine for handling them
- More difficult for large, mature companies, easier for smaller, immature companies

Creating change capability
- Creating new capabilities *internally*
- Creating capabilities *via a spinout* organization
- Creating capabilities *by acquisition*

Adapted from Christensen & Overdorf (2000)

**Types of Sustaining Innovation**

- **Application Innovation**
  - Take existing products / services to new markets
  - E.g., On-star to autos; tandem fault-tolerant computers to banking as ATMs

- **Product Innovation**
  - Established products to the next level; price reduction; usability improvements

- **Process Innovation**
  - E.g., streamline supply chain; move to on-line trading

- **Experiential Innovation**
  - Improve the customer’s experience
    - “Delighters” - “You’ve got mail!”
    - “Satisfiers” - rapid line management through airport security
    - “Reassurers” - FedEx package tracking

- **Marketing Innovation**
  - Improve customer touch, on line notification, c.f., e-bay, Amazon…

- **Business Model Innovation**
  - Reframing an established value proposition
    - Razor blades to shaving systems; from computing (Apple) to consumer lifestyle products
Capitalize on Disruptive Innovation

Structural Innovation
- To restructure industry relationships
  - Bank deregulation allowed Fidelity and CitiCorp to offer consolidated services (brokerage, consumer banking, insurance, etc.) under one umbrella

Which capability to change?

**Resources**
- Tangible and intangible
- High quality resources facilitates change

**Processes**
- Formal and informal
- Processes are not meant to change
- Disabilities to change in less visible processes

**Values**
- Basis for judgment at all levels
- Clear/consistent values facilitate change
- Two key values influence change capability ... How:
  1. Acceptable gross margins judged
  2. Interesting opportunities judged

Which forms of change are your organization capable of handling?
Capabilities evolve over time

The factors defining an organization’s change capabilities evolve over time:

- Begin with resources (primarily people)
  - Departure/addition of just a few people can have dramatic effects
  - Some fail to ever develop processes
    - Consistency, quality, and productivity suffer
- Move to visible, articulated processes and values
  - Founders impact initial processes and values
  - Success becomes independent of individuals
  - Repeatability
- Migrate to shared and invisible culture
  - Enables people to act autonomously and consistently
  - Can both enable or inhibit change

Fitting tactics to needs

<table>
<thead>
<tr>
<th>Poor</th>
<th>Use heavyweight team: within existing organization</th>
<th>Use heavyweight team: in a separate spinout organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good (sustaining)</td>
<td>Use lightweight or functional team: within existing organization</td>
<td>Use heavyweight team for in-house development; but commercialization requires a spinout</td>
</tr>
<tr>
<td>Good (disruptive)</td>
<td>What’s a “heavyweight” team?</td>
<td>Innovation fit with values</td>
</tr>
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Innovation fit with processes

Innovation fit with values
When & how to innovate? (1)

The Market Development Life Cycle


Riding the life Cycle

- Early Market
  - Early adopters, visionaries, the Press

- The Chasm
  - Lost novelty, not yet caught on, pragmatists wait; current customers have to help it catch on

- The Bowling alley
  - Gains acceptance amongst pragmatists in niche markets, building loyalty

- Tornado
  - Passed the test of usefulness: growing at double and triple-digit rates; competition fierce; imitators try to join in

- Main Street
  - (Early) hyper growth subsided; 1st wave consolidation; market-share pecking order established; incremental improvements
  - (Mature) growth has flattened, commoditization increased; 2nd wave consolidation thins out the bottom; growth through merger and acquisition, no new observable technologies on the horizon
  - (Declining) product ossification; market dominators unresponsive to customer needs; customers look for relief and alternatives; market rife for disruption

- Fault line and End of Life
  - Technology obsolescence strikes; apparent fault line between customer and product company sells; new product ‘tornado’ wreaks havoc; only alternative is how much customers will spend on legacy technology
When & how to innovate (2)

Aligning Innovation with the Life Cycle

- Existing technology to new markets
- Established offers in existing markets to next level
- Main Street - new efficiencies
- Surface modifications to improve customer experience
- Improve customer-touching processes
- Reframe established value proposition
- Restructure industry relations

Topic two

Process Innovation
Process & innovation

Business Context

- Market
- Technology
- Business partners

How is innovation organized to facilitate enhanced process performance?

- Process
  Why are processes created? How are processes managed? What are the defining elements? How are the elements related?

- Innovation
  Why is innovation needed? How is innovation managed? What are the defining activities? How are the activities related?

How does business process configuration influence and shape innovation?

Degrees of change

<table>
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<tr>
<th></th>
<th>Improvement</th>
<th>Innovation</th>
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<tbody>
<tr>
<td><strong>Level of change</strong></td>
<td>Incremental</td>
<td>Radical</td>
</tr>
<tr>
<td><strong>Starting point</strong></td>
<td>Process problems</td>
<td>Environmental change</td>
</tr>
<tr>
<td><strong>Frequency of change</strong></td>
<td>Continuous</td>
<td>Discrete</td>
</tr>
<tr>
<td><strong>Participation</strong></td>
<td>Bottom-up</td>
<td>Top-down</td>
</tr>
<tr>
<td><strong>Risk</strong></td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td><strong>Primary enabler</strong></td>
<td>Statistical control</td>
<td>Information Technology</td>
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Outcome and Process Focus

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</tr>
<tr>
<td>Radical versus Incremental Relates to both outcomes and Process and can be combined</td>
<td>Innovation fit with values</td>
</tr>
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Managing the BPI project portfolio

Prioritize, coordinate, and monitor portfolio of BPI projects

BPI management

Focused BPI projects

BPI project

BPI project

BPI project

BPI project
Building innovation capability

**TYPES**

1. **Leadership-driven capacity:** Individuals see opportunity and run with it
2. **Structural-driven capacity:** Mechanisms are put in place to enable change
3. **Organic capacity:** Employees see innovation as an integral part of their job

**INGREDIENTS**

1. The *ability* of people within the organization to innovate
2. The *desire* of people to act in an innovative manner
3. An *environment* that enables and empowers innovation

Innovation is like jazz -- not random; requires improvisation

Creativity is just having enough dots to connect

Adapted from Shapiro: Innovate your organization. The 24/7 Innovation www.24-7innovation.com.

Innovation and improvement

- **Improvement**
  - Process defined
  - Process measures defined
  - Process diagnosis
  - Improvements identified
  - Improvements prioritized
  - Process design and test
  - Implement improvements

- **Innovation**
  - Success indicators defined
  - Current strength-weakness analysis
  - Future opportunities-threat analysis
  - Innovations identified
  - Innovations prioritized
  - Process design and test
  - Implement innovation

Adapted from Beechner & Hamilton: “Infinity: A Model for Organizational Excellence” (www.paragonstar.com)
IDEAL improvement model


Stimulus for improvement
Set context & establish sponsorship
Establish infrastructure
Appraise & characterize current process
Develop recommendations & document results
Define processes & measures
Plan & Execute pilot plan
Execute, & Track installation
Set strategy & priorities
Establish process action teams & action plans

See also: CMM
CMMI

Critiquing the as-is process

7R's of process innovation
- Rethink
- Reconfigure
- Resequence
- Relocate
- Reduce
- Reassign
- Retool

Question | Apply when.....
--- | ---
How can activity frequency be reduced or increased? | An activity is non-value-added but necessary
How there is low variation in the process or product
How there is high variability and low setup costs and times

How would more information enable greater effectiveness? | Higher accuracy is needed
Greater segmentation would yield greater marketing effectiveness

How would less information or fewer controls improve efficiency? | A high proportion of costs goes to data collection and controls
The value received from information or controls is minimal
Absolute accuracy is not necessary

How can critical resources be used more effectively? | Utilization of key resources is low
Critical resources are performing non-value-added or waste work

Adapted from Stephen Shapiro
The 24/7 Innovation
www.24-7innovation.com
Reviewing the BPI triangle

Steven Alter (2002). Substitute:
- Work system → Business process
- Business process → Work practices

1. Create a snapshot of the business process
2. Find problems and opportunities for improvement
3. Explore effects of proposed process changes