Managing the Innovation Process

Organizational Learning
Overview

• Take-Away

• Required Readings

• Supplemental Readings

• Caveats
Take-Away

• Innovation is often a product of absorptive capacity

• Innovation can result from efforts of lead users

• Innovation is closely tied to organizational learning

• Innovation requires focus on window of opportunity
(Cohen & Levinthal, 1990)

• “Absorptive capacity: A new perspective on learning and innovation”

• Absorptive Capacity (ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends)

• Individual / Organization (cognitive knowledge structures / R&D communication)

• Path Dependence (capacity critical because cumulative and expectation forming)
(von Hippel, 1988)

- "The sources of innovation – Chapter 8: Predicting the source of innovation: Lead users (pp. 102-122)"

- **Lead Users**
  (face general needs, but well in advance of marketplace)
  (positioned to benefit significantly by solving problem)

- **Examples**
  (open source programs by developers, white-out by secretary)

- **Methodology**
  (identify trend, identify lead users, analyze insight, test concept)
(Argote, 1999)

- “Organizational learning: Creating, retaining, and transferring knowledge – Chapter 1: Organizational learning curves: An overview (pp. 1-34)”

- Organizational Learning Curves
  (as organizations produce more of a product, the unit cost of production decreases at a decreasing rate)

- Rate Differences
  (80% average, though much variation across organizations)

- Curve Predictors
  (quality of individuals, technology, and coordination)
(Brown & Duguid, 1991)

• “Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation”

• Communities-Of-Practice
  (informal groups of people connected through shared interest)

• Work Practice Disconnect
  (manuals do not often reflect how work is really practiced)

• Learning and Innovation
  (best done in the context of real work practices)
(Tyre & Orlikowski, 1993)

- *Exploiting opportunities for technological improvement in organizations*”

- **Episodic Pattern Of Technological Change**
  (initial burst of adaptive activity followed by stability followed by additional adaptive activity followed by stability…)

- **Window Of Opportunity**
  (energy levels are high and situation is novel at initial burst)

- **Managerial Implication**
  (focus attention on need for change while providing resources)
Caveats

• What if R&D is not available for absorptive capacity?

• Who are the lead users for non-existent markets?

• When do learning curves signal innovation?

• How does one identify a window of opportunity?