

# 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?