

What Is Innovation?

---

---

---

---

---

---

---

Definition of Creativity (recap)

- Candidate definitions:
  - The creation of something that is novel and produced intentionally – Weisberg
  - The creation of something that is novel and appropriate – Sternberg
  - The creation of something that is novel and judged to be valuable - Csikszentmihalyi

---

---

---

---

---

---

---

Innovation vs. Creativity

- Creativity: Generating novel & useful ideas
  - Creativity is the **concept**
- Innovation: Implementing new ideas in an organization
  - Innovation is the **process**

**Innovation = Creativity + Commercialization**

---

---

---

---

---

---

---

**Incremental vs. Radical Innovation**

- **Incremental Innovation**
  - New products that simply replaces current products
- **Radical/Revolutionary Innovation**
  - New products that creates new revenue or new markets

---

---

---

---

---

---

---

---

**Internal Dimension of Innovation**

- Based on knowledge & resources
- **Incremental innovation**
  - Builds upon existing company's knowledge & resources
  - Competence-enhancing
- **Radical innovation**
  - Requires completely new knowledge and/or resources
  - Competence-destroying

---

---

---

---

---

---

---

---

**External Dimension of Innovation**

- Based on technological changes and impact on market competitiveness
- **Incremental innovation**
  - Modest technological changes
  - Existing products on market remain competitive
- **Radical innovation**
  - Large technological advancements
  - Existing products become non-competitive and obsolete

---

---

---

---

---

---

---

---

**Incremental vs. Radical Innovation**

- Incumbents
  - In a better position under incremental innovation
    - Can use existing knowledge and resources
  - Radical innovation threatens current products & managerial status quo
- New entrants
  - Large advantage with radical innovation
    - No need to change existing knowledge

---

---

---

---

---

---

---

---

**Disruptive Innovation**

- Disruptive Innovation (Christensen, 1995)
  - New product/service designed for a new set of customers
  - Disrupts the revenue stream of current products.
    - Lowering prices
    - "Good enough" products
- Examples?

---

---

---

---

---

---

---

---

**Disruptive Innovation**

- New Market disruption
  - Product serves new market not served by incumbents
- Low end disruption
- Improvement rate exceeds rate of use of improvements
  - Disruptor focuses on least profitable customer
    - Customer unwilling to pay premiums for enhanced product functionality
- As disruptor increases profit margin
  - Drives established company out of the market

---

---

---

---

---

---

---

---

### Innovation vs. Invention

- Invention
  - “Embodiment of something new”
  - “An idea made manifest”
  - “Cash into ideas”
- Innovation
  - “Ideas applied successfully in practice”
  - “Ideas into cash”
- Edison = innovator
  - Made money from his ideas
- Tesla = inventor
  - Spent money on ideas but couldn’t monetize them

---

---

---

---

---

---

---

---

### Types of Innovation

1. Product Innovation
2. Process Innovation
3. Marketing Innovation
4. Organizational Innovation
5. Business Model Innovation

---

---

---

---

---

---

---

---

### Product Innovation

- Introduction of a new good or service
  - Substantially improved
    - Functional characteristics
    - Technical abilities
    - Ease of use
- Example: Wii, Life coaching

---

---

---

---

---

---

---

---

### Product Innovation - Service

- A new way to **deliver service** that result in enhanced customer value
  - Examples: Self-served gas station, overnight delivery, drive-through banking, YouTube

---

---

---

---

---

---

---

### Process Innovation

- Implementation of improved production or delivery method
- Manufacturing processes, development processes, business processes
- Example: Fast food, plasma cutter

---

---

---

---

---

---

---

### Marketing Innovation

- Development of new marketing methods
  - Deliver message about enhanced customer value
- Innovative approaches to
  - Design
  - Packaging
  - Pricing
  - Promotion (e.g., Viral Marketing)

---

---

---

---

---

---

---

### Organizational (Social) Innovation

- Social innovation
- Creation of new
  - Organizations
  - Managerial practices
  - Ways of running organizations
  - Organizational behavior
- Example: Google Campus

---

---

---

---

---

---

---

### Business Model Innovation

- Changing the way business is done
  - Capturing new customer value
- Examples: Netflix, "Bag, Borrow, or Steal"

---

---

---

---

---

---

---

### Product Life Cycle Curve

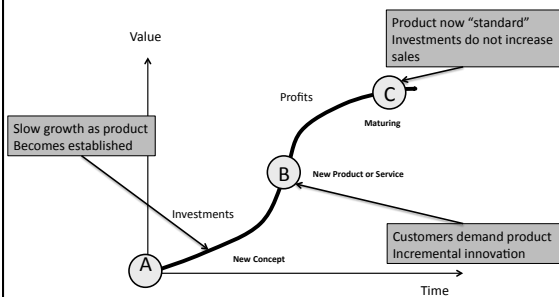


Fig. 2.2 – (p. 38, Carlson & Wilmot)

---

---

---

---

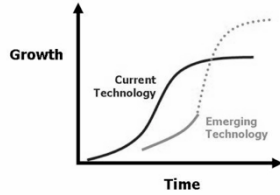
---

---

---

### Product Life Cycle Curve

- New innovations replace ones
  - Most fail and never produce normal returns
  - Continue to drive growth upwards
- Emerging technology initially yields lower growth
  - Eventually overtakes current technology



---

---

---

---

---

---

---

---

### Sources of Innovation

- Manufacturer innovation
  - Person or business innovates in order to sell the innovation
- End-user innovation
  - Person or business innovates for their own use
    - Existing products do not serve their needs

---

---

---

---

---

---

---

---

### Hackerspaces

- People with common interests can meet/socialize/collaborate
- Open community labs
  - Machine shops, workshops, studios
- Share resources & knowledge
  - Build and make things

---

---

---

---

---

---

---

---

## Hackerspaces

- Centers for peer learning and knowledge sharing
  - Workshops, presentations, lectures
- Offer social activities for members
  - Game nights, parties
- Michigan
  - Ann Arbor – [All Hands Active](#)
  - Detroit – [i3Detroit](#)

---

---

---

---

---

---

---