



# Innovation Management for Competitive Advantage

---

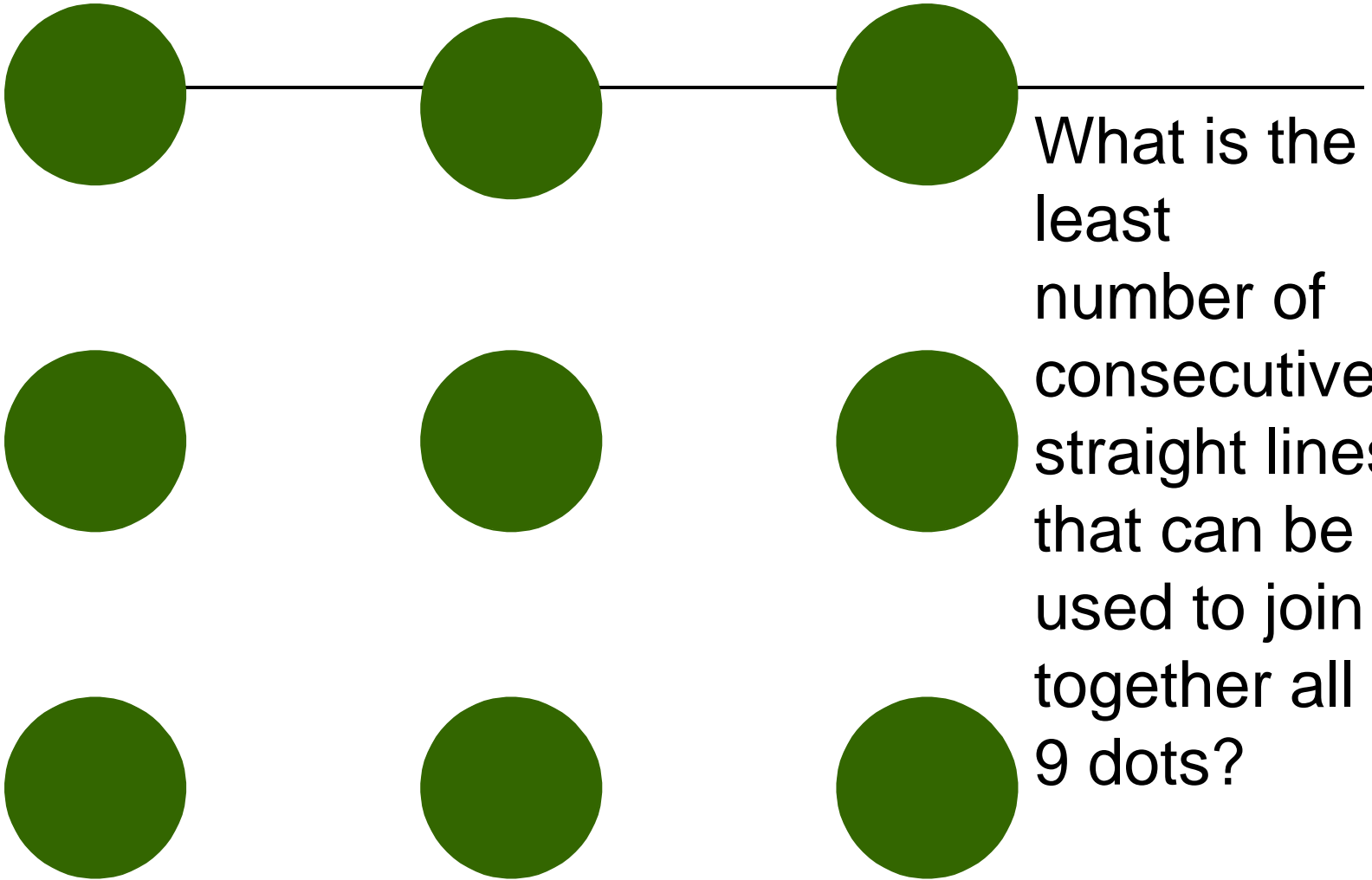
By Sherwat Elwan Ibrahim  
Associate Professor  
Faculty of Management Technology  
German University in Cairo



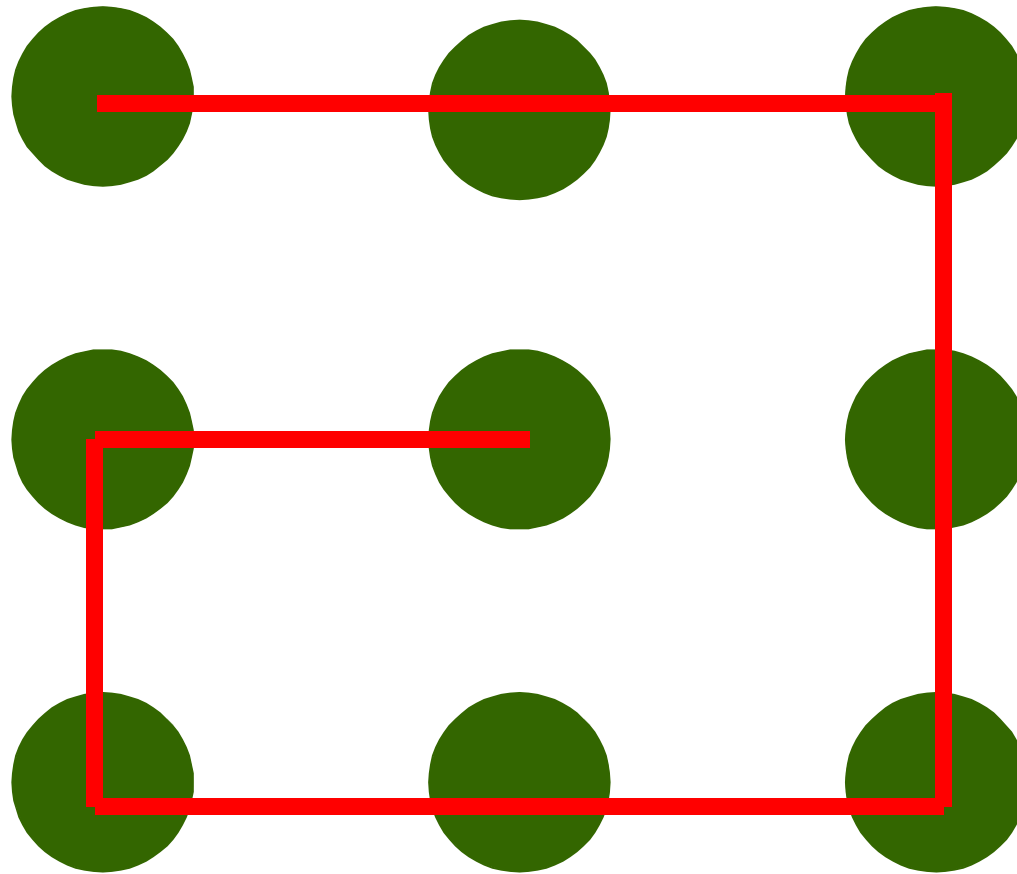
# Outline

---

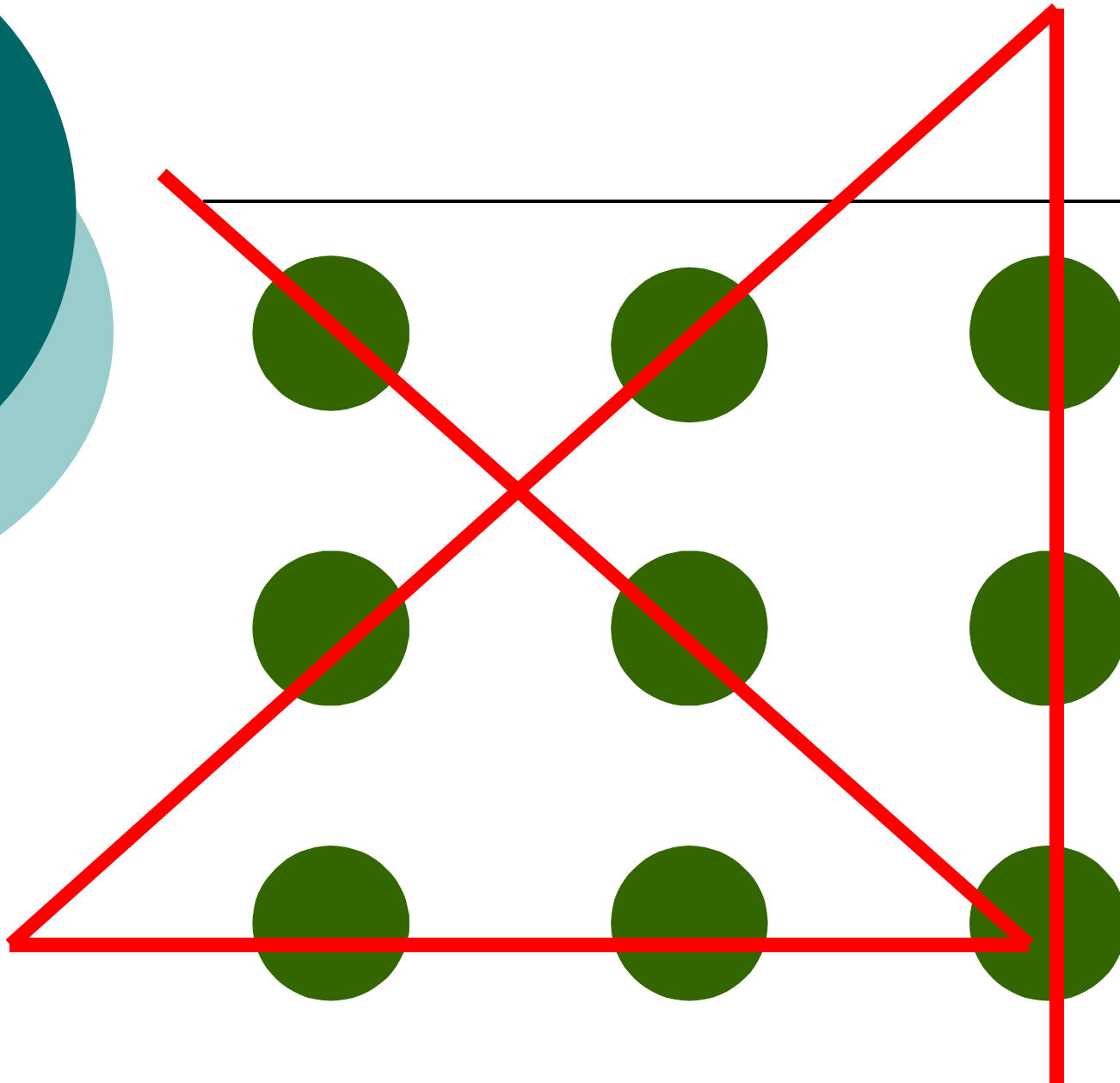
- What is Innovation?
  - The Innovation Funnel
  - Forms of innovation
    - Web-Based Business Models
- Competitive Advantage
  - Linking your Business to the Environment
  - Defining your Industry
- Managing for Innovation
  - Key Management Decisions
  - Organizations as open systems
  - Workforce and Job design
  - Basic Organization Functions
- Designing for Competitive Advantage
  - Quality Function Deployment



What is the least number of consecutive straight lines that can be used to join together all 9 dots?

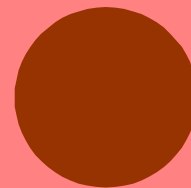
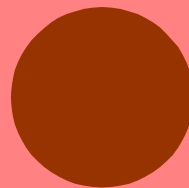
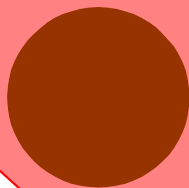
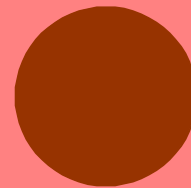
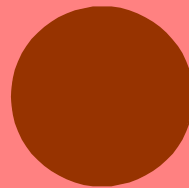
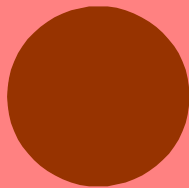
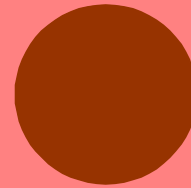
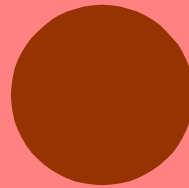
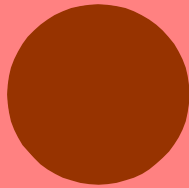


5?



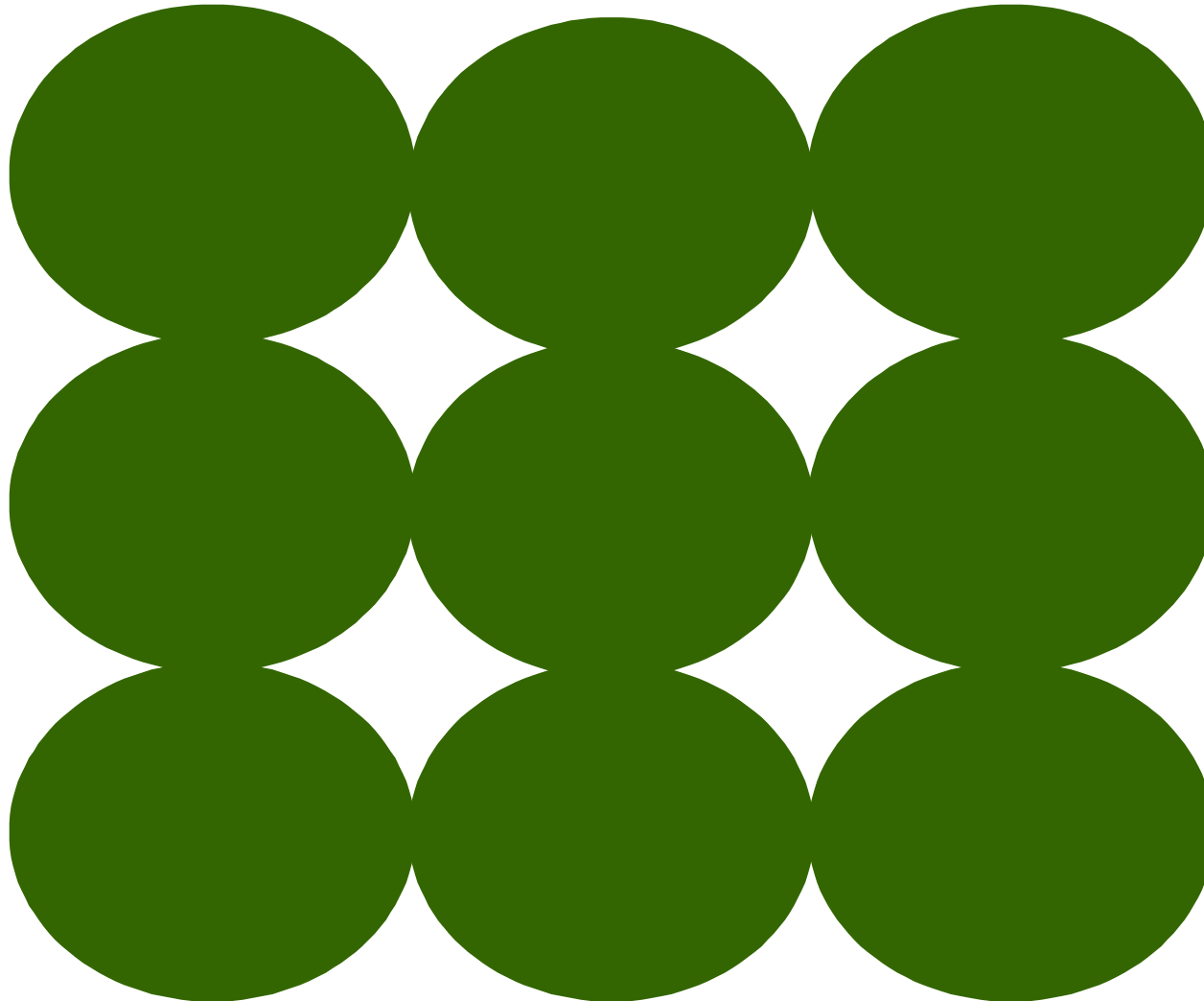
4?

What if your pen is very fat?



Who needs straight lines?

---





# What is Innovation?

---

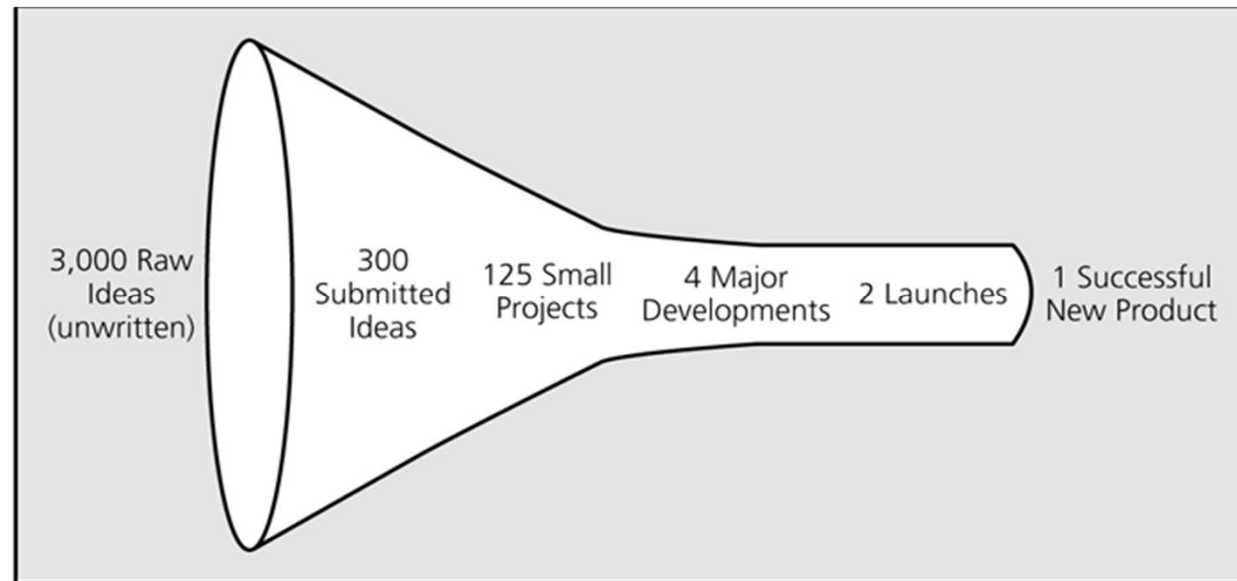
- In general, innovation can be described as the *creation, implementation, and commercialization* of new ideas related to *products & services, processes, business models*
- *Technological Innovation* is now the single most important driver of *competitive advantage* in most industries
- Innovation is driven by the ability to see connections, spot opportunities, and take advantage of them



# The Innovation Funnel

- According to one study of innovation success rates with data on patents, venture capital funding, and surveys, it takes about 3,000 raw ideas to produce one significantly new and successful commercial product.

**FIGURE 1.3**  
**The Innovation**  
**Funnel**





# Forms of innovation

---

- Three forms of innovation:
  - Product
    - Results in the creation of new or improved goods and services.
  - Process
    - Results in better ways of doing things.
  - Business model innovation
    - Results in new ways of making money.
- Innovations require:
  - Creativity and Invention
    - Act of discovery.
    - Development of new ideas.
  - Application and commercialization
    - Act of use.
    - Implementation of new ideas in the market.



# Web-based business models

---

- *Brokerage model* — bringing buyers and sellers together to make transactions.
- *Advertising model* — providing information or services while generating revenue from advertising.
- *Merchant model* — selling products wholesale and retail through the Web.
- *Subscription model* — selling access to a Web site through subscription.
- *Infomediary model* — collecting information on users and selling it to other businesses.
- *Community model* — supporting the site by donations from community of users.



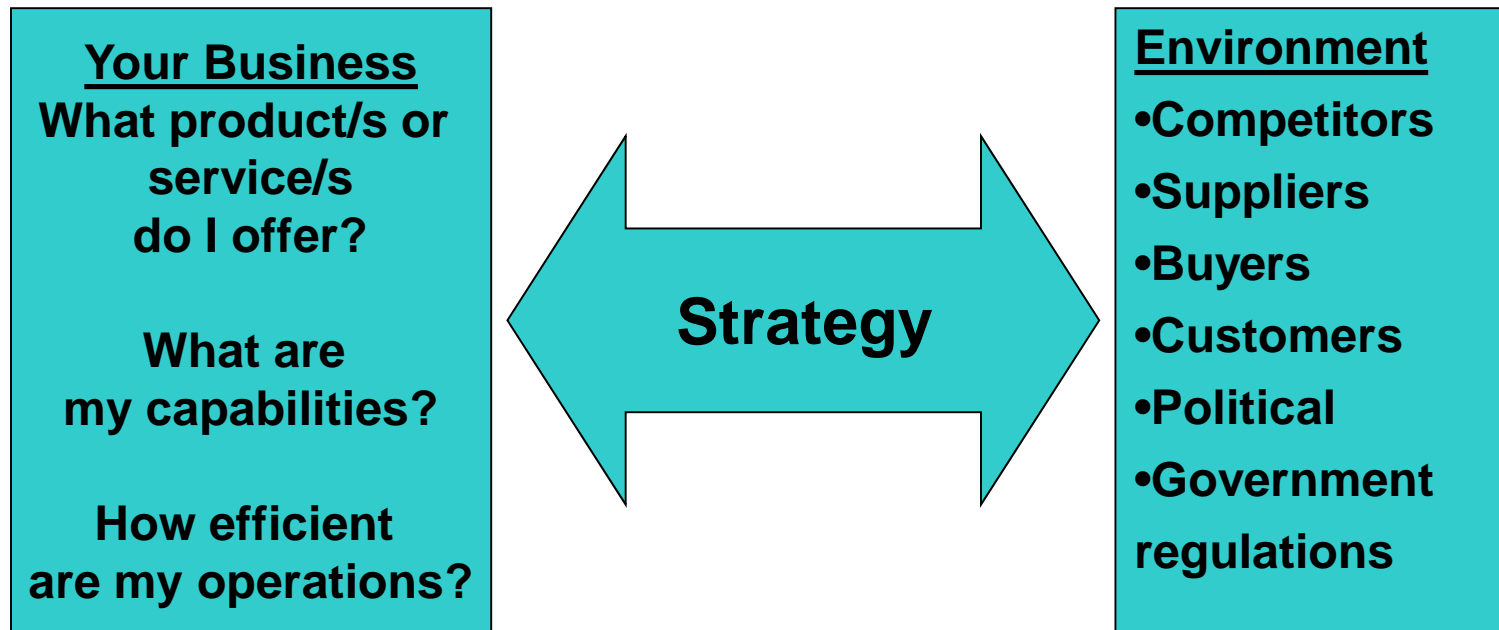
# Competitive advantage

---

- Competitive advantage is an attribute or set of attributes that allow an organization to outperform its rivals.
  - Can be related to; Cost, Quality, Delivery, Flexibility, Variety, Customer service, Innovativeness, Location
- Sustainable competitive advantage — one that is difficult for competitors to imitate.
- Strategic analysis – process of analyzing the organization, the environment, its competitive position and current strategies

# Linking your Company to the Environment

---



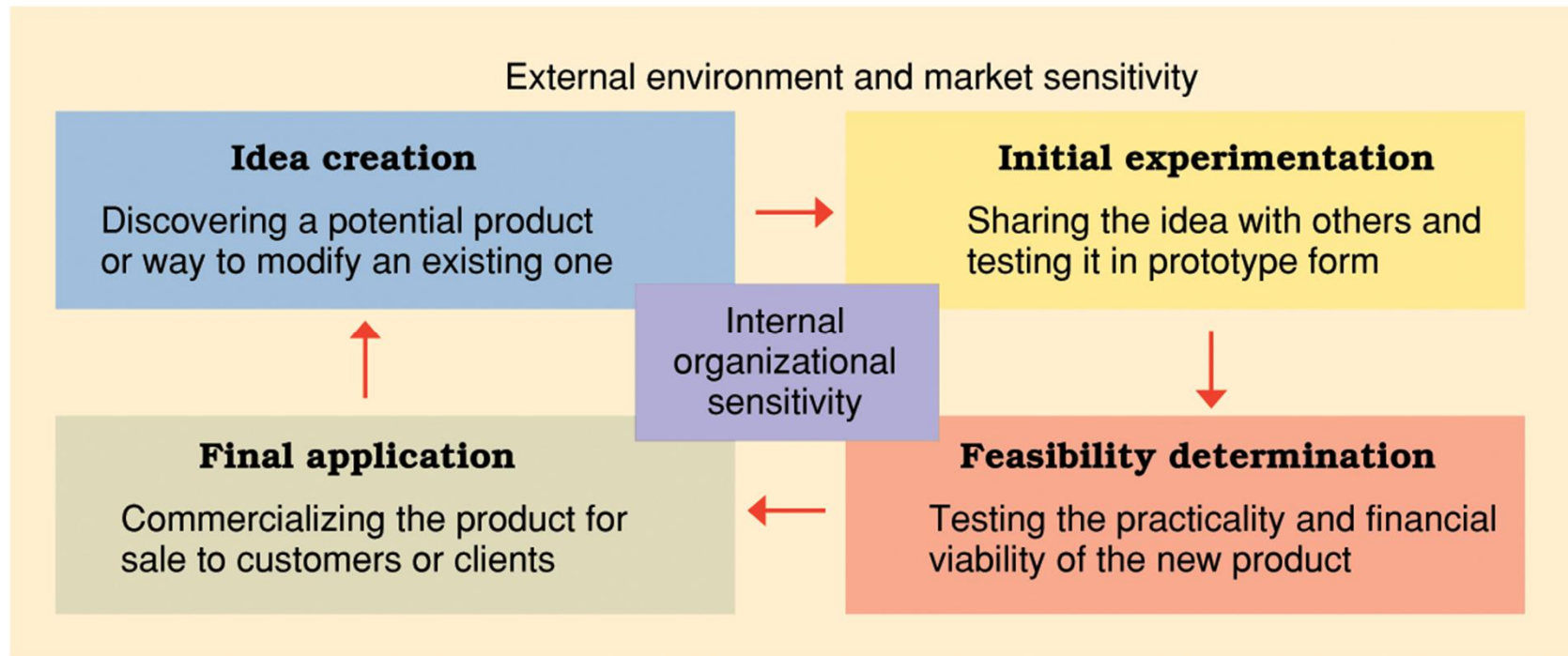


## Exercise: Defining your Industry

---

- Define your Market:
  - What product/s or service/s do you offer?
  - Who are your customers? Are they segmented
  - Where will you offer your products or services?
- Define your Competitors:
  - Who are your main competitors?
  - Do they come from different industries?
  - Group your competitors (segmentation)

# Managing the Innovation Process



Commercializing innovation: Process of turning new ideas into products or processes that increase profits through sales or cost reductions.



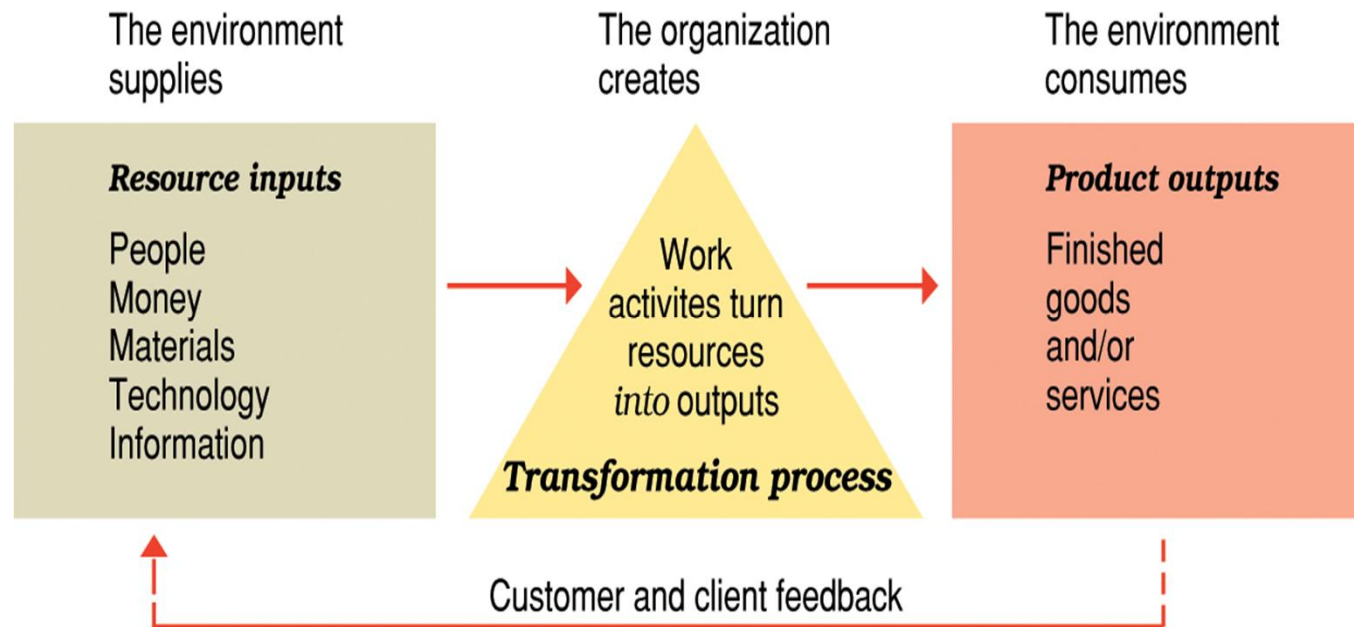
# Key Management Decisions

---

- What
  - What resources/what amounts
- When
  - Needed/scheduled/ordered
- Where
  - Work to be done
- How
  - Designed
- Who
  - To do the work



# Organizations as open systems





# Workforce and Job Design

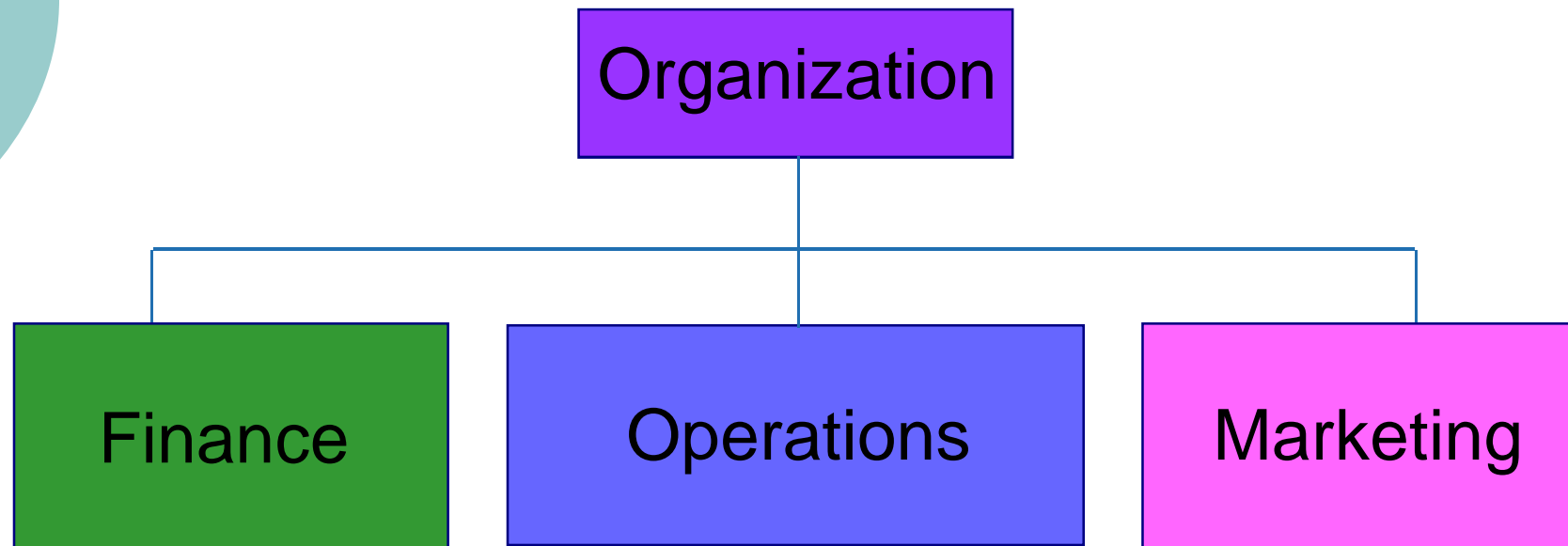
---

- Job design involves specifying the content and methods of job
  - What will be done
  - Who will do the job
  - How the job will be done
  - Where the job will be done



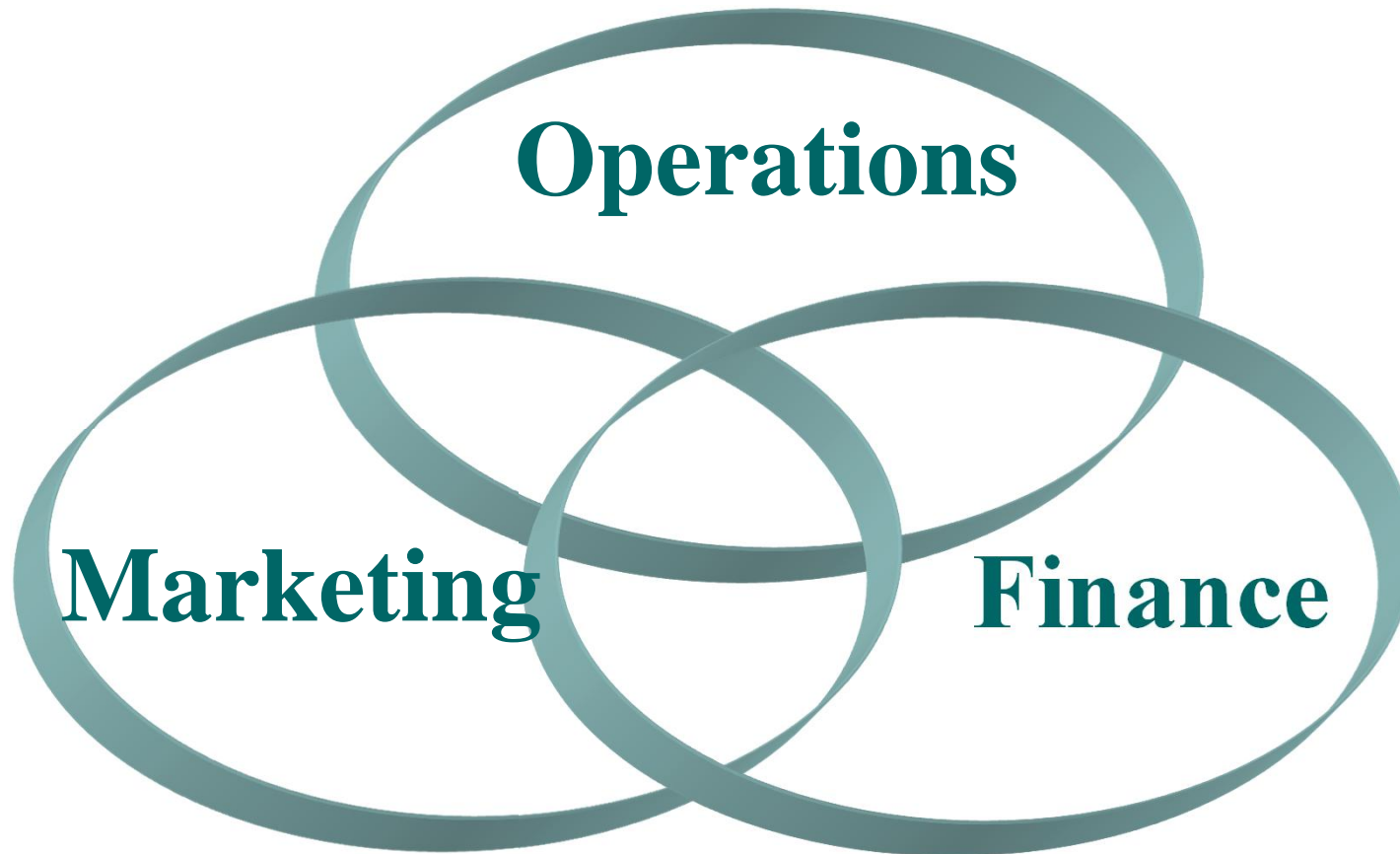
# The Three Basic Functions

---



# Business Operations Overlap

---





# Designing for Competitive Advantage: Quality Function Deployment (QFD)

---

- Helpful in product and service design
- Quality Function Deployment
  - Voice of the customer
  - Technical capabilities of the company
- Purpose is to ensure that customer requirements are factored into every aspect of the process
- Tool for defining the “right” problem to solve

# QFD Dry-Cleaning Service Example

Customer requirements (What)	Importance to Customer	Operating Requirements (How)			
		Good Employee Training	Dry Clean Chemicals and Filters	Firm Pressing Pads	Good Equipment Maintenanc e
Completely clean	3	◇	😊		◇
Perfectly Pressed	2			😊	◇
No delay at the counter	2	😊			
Quick return to customer	3	□			😊
Friendly service	1	😊			
<b>Importance Weighting</b>		<b>39</b>	<b>27</b>	<b>18</b>	<b>32</b>

Relationship	Value	Symbol
<b>Strong</b>	<b>9</b>	😊
<b>Medium</b>	<b>3</b>	□
<b>Weak</b>	<b>1</b>	◇



# Exercise

---

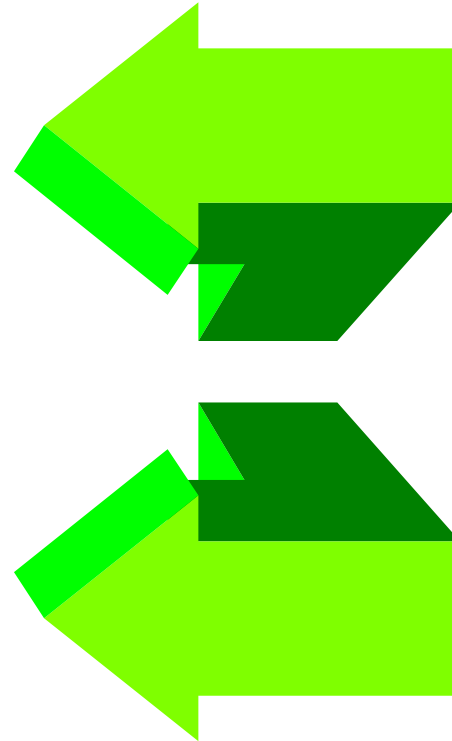
- Identify a particular product or service that you will design for your business and prepare a QFD matrix
- List five to six customer priorities and rate their importance in light of your competitive strategy (try not to include price or cost, except if it is critical to your competitive priorities)
- List five or six operational capabilities (things you can control)
- Discuss the strength of the relationships between customers needs and operational capabilities, and use symbols to reflect your decisions on the strength of the relationships
- Calculate Importance Weights (Multiply value of each symbol with the corresponding customers importance)



# Service Quality Dimensions

---

- Convenience
- Reliability
- Responsiveness
- Time
- Assurance
- Courtesy
- Tangibles







# Key messages

---

1. Pay attention to your environment
  - It is not enough to focus on your own business
  - Need to understand your buyers, suppliers and competitors
  - Think about how the environment either constrains or an opportunity
2. Choose a competitive position
  - You cannot be all things to all people
  - Need to make tough choices and think about trade offs



# A Good Strategy

---

- A good strategy involves trade-offs and hard choices
  - *You cannot be all things to all people*
- A good strategy depends not just on your company and its actions
  - *Actions by other actors in the market matter*
- A good strategy is not just about today, but about the future
  - *And the future is unknown*

# Restaurant Seating Flow Chart

