


IT and Competitive Advantages

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LEARNING OUTCOMES

- Understand each of the five forces in Porter's Five Forces Model
- Determine kind of IT that help deal with the 5 forces and gain competitive advantage

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[13-Min Porter's Harvard Business School Interview](#)

Michael Porter: Long-term strategies in a down turn (13 mins)
<http://www.youtube.com/watch?v=mwc073nNl3Q>

Michael Porter – Innovation & Competitiveness P1 @ GCF 2011 (20 mins)
<http://www.youtube.com/watch?v=NZ1f6kUKE-88&feature=related>

Michael Porter – Innovation & Competitiveness P2 @ GCF 2011 (20 mins)
<http://www.youtube.com/watch?v=EijpXhrj8N8&feature=relmfu>

COMPARATIVE ADVANTAGE

- ❑ David Ricardo (1817) *On the Principles of Political Economy and Taxation* introduced the theory of comparative advantage
 - Using machinery, an English worker can make 2 shoes and 2 shirts in an hour
 - A Portuguese worker can make either 2 shoes or 4 shirts in an hour without machinery
- ➔ The less industrialized country, Portugal, has a comparative advantage in shoes for trade purpose

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COMPETITIVE ADVANTAGE

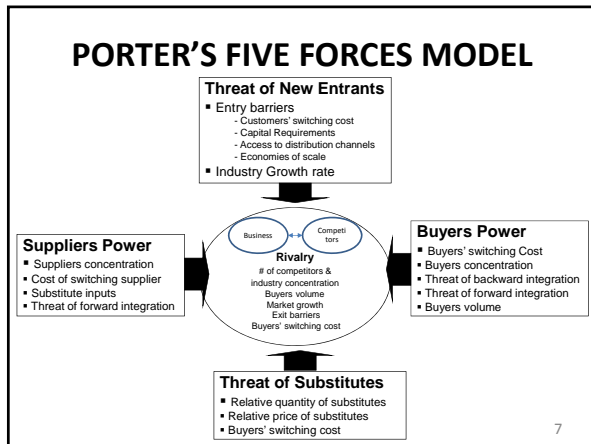
- ❑ To survive and thrive an organization must have a competitive advantage, that is:
 - a strategic advantage one business has over its rivals within its competitive industry.
 - an attribute (or combination of attributes) acquired or developed by a business allowing it to outperform its competitors.
 - Examples:
 - distinctive product that customers place a greater value in
 - Unique service that stands out
 - Access to rare natural resources
 - highly skilled workers, etc.

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GAINING COMPETITIVE ADVANTAGE

- ❑ Organizations should, constantly, analyze their business environment through environmental scanning
 - e.i., the acquisition and analysis of events and trends in the environment external to an organization
- ❑ Tools for performing environmental scanning:
 - Socrates Technology-based Competitive Strategy system (1983-1990)
 - SWOT analysis – Strengths, Weaknesses, Opportunities, Threats (Stanford Research Institute 1960-70)
 - Porter's Five-Force Model
 - Porter, M.E. (1979) *How Competitive Forces Shape Strategy*, Harvard Business Review, March/April 1979
 - Porter, Michael (1985) *Competitive Advantage*, Free Press, New York.

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Rivalry Among Existing competitors

Rivalry

- # of competitors & industry concentration
- Buyers volume
- Market growth
- Exit barriers
- Buyers' switching cost

- Industry Concentration**
 - % of market held by largest firms
 - Bureau of Census' Concentration Ratios (CR)
 - CRs measure market share held by the 4, 8, 25, 50 largest firms in sector
 - High CR → Few competitors, less attractive industry, less rivalry(?)
- Market growth**
 - Slow market growth → Increased rivalry
- Exit barriers**
 - High cost abandoning a product → Firm must compete
- Switching cost**
 - Low buyer switching cost → More intense rivalry

U.S wireless subscribers: 327M. What are the largest U.S cell phone carriers?

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Buyer Power

Buyers Power

- Buyers' switching Cost
- Buyers concentration
- Threat of backward integration
- Threat of forward integration
- Buyers volume

- Assessed by analyzing the ability of buyers to directly impact the price they are willing to pay for an item.
- High Buyers' switching cost → Less Buyer power
- Buyers concentration
 - Few buyers with large market → share More buyer power
- Buyer's Threat of backward integration
 - Example: Large automakers vs. Tire manufacturers
- Seller's Threat of forward integration
 - Example: Movie producers vs. Movie theaters

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Supplier Power

Suppliers Power

- Suppliers concentration
- Cost of switching supplier
- Substitute inputs
- Threat of forward integration

- Assessed by the suppliers' ability to directly impact the price they are charging for supplies
- High Supplier concentration → More supplier power
 - Example: Drug industry vs. Hospitals
- High cost to switch supplier → More supplier power
- Presence of substitute inputs → Less supplier power

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Threat of Substitutes

Threat of Substitutes

- Relative quantity of substitutes
- Relative price of substitutes
- Buyers' switching cost

- More substitute products or services
 - More demand elasticity → More competition
- Affordable substitutes → More switching
- Low switching cost → More intense competition

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Threat of New Entrants

Treat of New Entrants

- Entry barriers
 - Customers' switching cost
 - Capital Requirements
 - Access to distribution channels
 - Economies of scale
- Industry Growth rate

- High when it is easy for new competitors to enter a market
- Low when entry barriers are high
- Entry barriers are high with
 - significant capital requirements
 - high switching cost
 - Hard to access distribution channels

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Three generic Competitive Strategies to gain competitive advantage

Cost leadership	Differentiation	Focus
<ul style="list-style-type: none"> • firms attempt to create low cost structures in order to be price competitive 	<ul style="list-style-type: none"> • firms attempt to differentiate their offerings by offering superior quality and/or valuable product features 	<ul style="list-style-type: none"> • firms attempt to target a specific niche or market to develop a competitive advantage

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5 Generic Competitive Strategies

TYPE OF COMPETITIVE ADVANTAGE THAT MAY BE PURSUED

	Lower Cost	Differentiation
Broad buyer segment	OVERALL COST LEADERSHIP STRATEGY	BROAD DIFFERENTIATION STRATEGY
Narrow buyer segment	FOCUSED LOW-COST STRATEGY	FOCUSED DIFF. STRATEGY

BEST COST PROVIDER STRATEGY

Best Cost Provider: Emphasis on low cost and more than minimally acceptable quality, service, features, performance. PORTER, 1985.

Using Porter's tools to gain competitive advantage

- 1) Use 5-Force model to analyze industry's competitiveness and attractiveness
- 2) Based on the strengths and weaknesses of the competitive forces, select the generic strategy(ies) to pursue
- 3) Analyze your business value chain to identify the best candidate activities for applying the strategy(ies)
- 4) Determine what technologies would potentially help

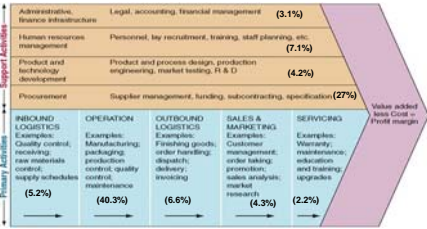
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Performing Value Chain analysis

It may involve:

- Customers' survey
- Employees' survey
- Analyzing business processes
- Analyzing external data (competition, economy, etc.)

If Buyers' Power is high and the strategy is to lower costs, Operations may be a target activity to reduce costs



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Five-Forces Model Videos

- Michael Porter – The Five Forces that Shape Strategy (10 Mins) http://www.youtube.com/watch?v=mYF2_FBCvXw
- Michael Porter – Innovation & Competitiveness P1 @ GCF 2011 (20 mins) <http://www.youtube.com/watch?v=N2t6kUKE-88&feature=related>
- Michael Porter – Innovation & Competitiveness P2 @ GCF 2011 (20 mins) <http://www.youtube.com/watch?v=EijpXhrj8N8&feature=relmfu>
- Michael Porter - Global Competitiveness Report 2007 (15 mins) <http://www.youtube.com/watch?v=kzn9-M2umFQ>
- Michael Porter with Charlie Rose (60 Mins) <http://www.youtube.com/watch?v=SJVkUbGh3w4>
- Michael Porter: Long-term strategies in a down turn (13 mins) <http://www.youtube.com/watch?v=mwc073nN3Q>
- Oxford University Learning lab: Porter's five forces explained <http://www.youtube.com/watch?v=5jInUxxsDP0&feature=related>

Institute for Strategy and Competitiveness

- Visit Michael Porter's Institute for Strategy and Competitiveness. There are numerous articles, videos, book excerpts, etc.: <http://www.isc.hbs.edu/>

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SUMMARY QUESTIONS

See exercises posted to class web site

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REVIEW EXERCISES

Same as the last three questions in the In-Class-Exercise posted to class web site

Question 1: imagine the retail gasoline business in a typical American city where there are many gas stations. What kind of technology can help increase customers' power? In answering the question, you need to provide two examples of technology that could be used by customers in order to increase their buyer power by identifying the cheapest seller. Explain. You may search the internet to provide some details about each of the technologies.

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REVIEW EXERCISES

Question 2: You read a good article that reported that car repair shops in your area are paying high prices to buy parts from the three local auto parts businesses. After thinking about it, you decided to explore the possibility of starting a business that could give local car repair shops – and even other car repair shops from the surrounding area – more bargaining power. The business plan you drafted includes using UPS and FedEx for delivery. You located five major auto parts suppliers from whom you can buy the parts at much lower price than the selling price of the local auto parts businesses. You approached UPS and FedEx about the business idea and, based on the information received from them, you realized that you can deliver the parts 15% cheaper than the local auto parts businesses after including the shipping fees. Now, you are thinking of a kind of information technology or information system that you may implement to support the activities involved in your business. The system should be accessed remotely by the car repair shops (your customers) giving them more bargaining power. Discuss in more detail what the system will look like along with the key features to be found in it.

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REVIEW EXERCISES

Question 3: A company has developed a software program that helps shoe manufacturers design shoes with unique features. The software includes an updatable database of shoe designs from all major shoe manufacturers. Among other things, it can analyze and compare shoe designs, determine their best features, and allow its user to select different features they want to incorporate in a new design. A shoe manufacturer is interested in buying the software for exclusive use. What generic competitive strategy/advantage the company would be pursuing by using the software? Explain.

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