MIS 5402 Spring 2017 – Managing Technology & Systems Session 1-2 – IT and Competitive Strategies

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In this session, we will discuss

- What determines a firm's competitive strategies
- How IT supports and facilitates the execution of competitive strategies



Strategy 101 (1/2)

- What is a competitive strategy?
- What is a competitive advantage?
- What is a *sustainable* competitive advantage?

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Strategy 101 (1/2)

• <u>Competitive strategies</u> : how a business firm competes in a particular business or industry (HBS)

 how a company can gain a *competitive advantage* through a *distinctive* way of competing

- Examples?
 - introducing new products
 - Iowering prices
 - entering new markets
 - providing superior services
 - M&A, diversification, vertical integration



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http://www.blackjack.org/strategy/

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Strategy 101 (2/2)

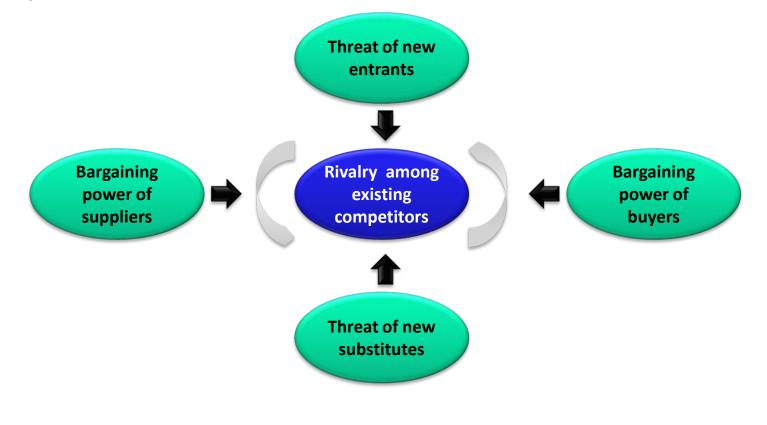
• <u>Competitive advantage</u>: strategic advantage over its rivals within its competitive industry

- A product or service that customers place greater value than on similar offerings from competitors
- Some competitive advantages do not last long (i.e. temporal competitive advantages),
- since competitors keep copying, imitating, or replicating.
- *Sustainable* competitive advantages is a basis for *long-term* profitability for the firm
 - achieving financial performance that *consistently* outperforms industry peers



Porter's Five Forces Model (1/2)

determines which industry or market is more competitive (i.e. less profitable)



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Porter's Five Forces Model (2/2)

- An industry is more profitable (less competitive) when
 - buyers do not have a strong bargaining power,
 - suppliers do not have a strong bargaining power,
 - threat of new entrants is weak
 - threat of new substitutes is weak
 - and competition among existing competitors is not intense.

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Bargaining Power of Buyers (1/3)

- What does it mean by a bargaining power of buyers?
- When would buyers have a strong bargaining power? What affects bargaining power?
 - How about the number of buyers?
 - How about price-sensitivity?
- Any example of switching costs?





Bargaining Power of Buyers (2/3)

- Buyers do not have a strong bargaining power (price becomes higher) when
 - the number of buyers is large compared to the number of suppliers,
 - they are price-insensitive (i.e. they buy the product no matter how expensive it is)
 - and they face high switching costs.



Bargaining Power of Buyers (3/3)

- Buyers face high switching costs when
 - they are locked in with a long-term contract (they have to pay termination fees to break the contract),
 - they enjoy network effects (the more customers use the same product, the more valuable to them, e.g. Facebook),
 - and it is expensive to change and find an alternative (high transaction costs) which include finding other providers, writing contracts, legal costs, training, and so forth.



Threat of New Entrants (1/2)

- Suppose you've got \$300 millions from winning a lottery. You want to start a new airline company.
- What does it takes for you to make the first flight take off?
 - These constitute "barriers of entry."



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Threat of New Entrants (2/2)

- Threat of new entrants is low when there are barriers to entry, which include
 - capital investments,
 - economies of scale,
 - established customer base,
 - brand,
 - government regulation
 - patent,
 - and access to suppliers and distributors.



Rivalry among Existing Competitors

- If there are so many competitors in your industry or your market,
- what would you do to better compete with them?
- How to achieve higher profitability, not just market share?
- Differentiation!
 - Differentiated or high-quality products and services reduce both rivalry and bargaining power of buyers.
 - increase profitability



Otis's Elevator Manufacturing/Service Business (1/2)

- According to the case, which business is more profitable?
 Elevator manufacturing or service?
- Why? Explain based on the five forces.
- Manufacturing (installing a new elevator) is not profitable because the market is mature,
 - the number of available customers is small, so they have high bargaining powers.
 - Otis cannot set up a high price for a new elevator.



Otis's Elevator Manufacturing/Service Business (2/2)

- "The service market attracted *many participants* because of its steady demand, *low barriers of entry*, and high profitability." (p. 3)
 - Doesn't it mean that the service market is not profitable for Otis?
- No, even though there are many players in the service market, most of them are little guys, while Otis is a "big guy."
- Newer elevators with microprocessors cannot be maintained by little guys (i.e. products are differentiated.)
- Otis has a brand power. Customers want to trust its brand rather choosing a unknown provider.



You and Your Doctor

- How often do you change your doctor?
- Will Otis customers (building owners or managers) change an elevator service company often? Why or why not?
 - Changing service provides requires a substantial amount of transaction costs (or switching costs).
- If a customer doesn't change its service provider frequently, which party has more bargaining powers?
 - The service provider can demand higher prices.

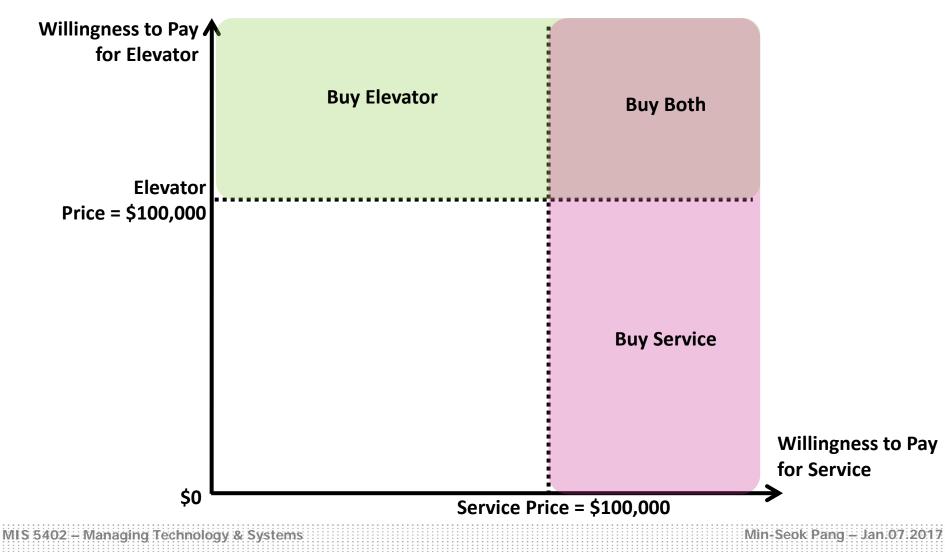


Bundling

- Can you think of an example of bundle around us?
- Why do firms sell a bundle?
- Why would bundling up an elevator (product) and maintenance services together (i.e. *total solutions*) be more profitable than selling an elevator and services individually?
 - By bundling up an elevator and a service contract with some discount, Otis can lure customers who would not buy a service contract without discount.

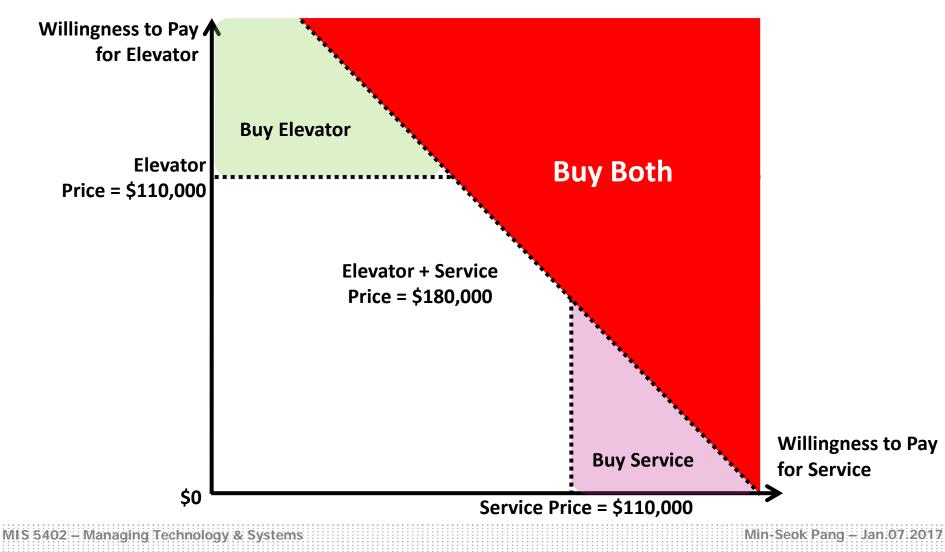


Bundling Profitability (1/2)





Bundling Profitability (2/2)



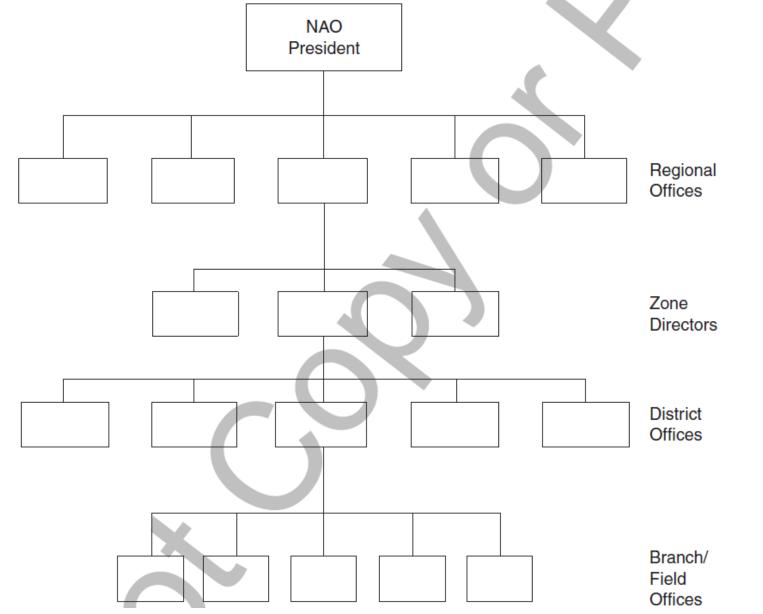


OTISLINE Customer Service Center (1/2)

- How were things going before OTISLINE?
- How now are things going after OTISLINE?
- What are the improvements in customer service from OTISLINE?



http://www.instanthair.net/products/details.asp?PDID=10



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Regional offices are geographically dispersed throughout North America.

Zone directors have three to five district managers reporting to them.

• District managers have two to six branch/field offices reporting to them.



OTISLINE Customer Service Center (2/2)

- Before OTISLINE, the upper management had little idea on what's going on in the field. There were in the dark.
- After OTISLINE, every information on customer service is transparent and shared throughout the organization.
- Customer service quality and speed have improved.
- Customers become more satisfied and make less complaints.
- In addition to this, there are more far-reaching changes:
 - the two layers of hierarchies are eliminated,
 - and the upper management can monitor service progress and quality on a real-time basis.



Strategic Transformation from Manufacturing to Service (1/3)

- "To become the recognized leader in service excellence among all companies not just elevator companies worldwide." (p. 1)
- In Bousbib's description, the company did not simply provide elevators but total solutions to customers. (p. 2)
- Bousbib challenged his executive staff to launch a new initiative that would make Otis the number one service company in the world. (p. 15)



Strategic Transformation from Manufacturing to Service (2/3)

• Bousbib said "As an engineering and manufacturing company, we did not have the same focus on customer service process... we needed to change the culture and better reflect that we are in fact a service company. These new processes had to be embedded in every aspect of the company's operations." (p. 5)

• What does he mean by this?



Strategic Transformation from Manufacturing to Service (2/2)

- What is Bousbib's decision to transform Otis to a service provider?
- What is BHAG? (p. 5)

Step in Overall Business Process	Proportion of Elapsed Time (current %)	Cycle Time Reduction (target factor)
Project proposal	3%	10x
Sales processing	8	4x
Order fulfillment	30	5x
Field installation	41	12x
Closing activities	18	<u>2x</u>
Total	100%	5x

Table A Fivefold Improvement in Order-to-Hand-Over Cycle

Why is this "quantum leap improvement" (p. 5) necessary?



Otis Order-to-Hand-Over Process

- For a new elevator to be installed, what steps is Otis taking?
- Who are involved in these process?
- Do they work independently?



http://blog.fabsuite.com/2011/06/it%E2%80%99s-all-a-process/



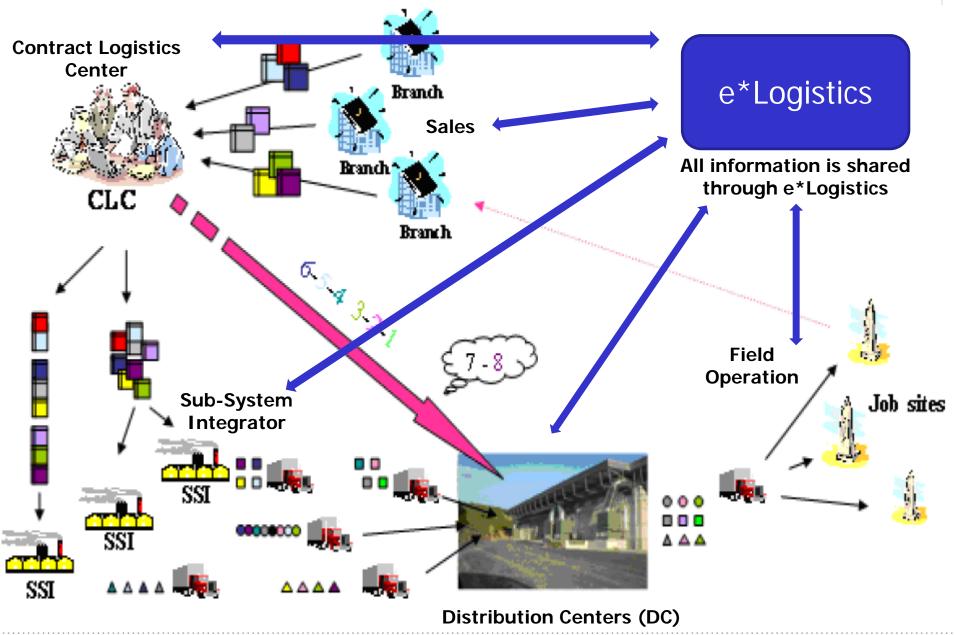
Group Discussion for e*Logistics

- Three Areas
 - Project Proposal / Sales Processing
 - Order Fulfillment
 - Field Installation / Closing Activities



- Write answers to three questions in one page in a group of 4-5.
 - How were things going before e*Logistics?
 - How now are things going after e*Logistics?
 - What are the improvements from e*Logistics?
- One best group will get a waiver for one reading brief.

New Order-to-Hand-Over Process





e*Logistics (1/4)

- e*Logistics enables real-time *information sharing and integration* between sales, CLC, SSI, DC, and field installation,
 - facilitating seamless collaboration and coordination amongst them.
- Without collaboration and coordination, cycle time cannot be reduced and customer satisfaction cannot be improved.



e*Logistics (2/4)

- In sales proposal and processing,
 - Before e*Logistics, field installation was minimally involved in proposal and sales process,
 - which led to over-promise of salesmen and customer dissatisfaction later on.
 - After e*Logistics, sales and field installation work together more closely via tight coordination and information sharing, toward more realistic, promising sales.



e*Logistics (3/4)

- In order fulfillment,
 - Salesmen used to coordinate with individual factories, which was redundant, inefficient, time-consuming
 - Now, CLC coordinates every activity with sales and SSI.
 - It used to be that "we gotta produce everything because we are a manufacturing company."
 - Now, Otis procures its parts and components from any suppliers who can provide with higher quality and lower prices, be they Otis factories or outside vendors.



e*Logistics (4/4)

- In field installation, the push system changes to the pull system.
 - There was the push system, since the factory was the boss. ("We finished making things and we're shipping no matter what.")
 - A huge amount of inventory used to scatter across 35,000 job sites around the world.
 - Now, the field installation is the boss. (It used to be the factory).
 - The production and delivery are scheduled and coordinated according to customers' timeline and requirements.



IT is a key pillar in Otis's transformation

"The critical <u>enabler</u> of this information transformation was a project called the *e*Logistics* information transformation project."
 (p. 7)

- "E*Logistics capabilities become a <u>key requirement</u>." (p. 7)
- Bousbib's view was that ... "the *e*Logistics* program was the key <u>facilitator</u> of that information transformation." (p. 8)



http://frrl.wordpress.com/2009/05/31/the-fifth-pillar-of-amateur-radio-hiding-in-plain-sight/

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Physical Assets to Information Assets

 "Traditionally we had focused on the management of physical assets. The next step in our evolution will be the management of information flows between all the participants ..." (p. 8)

- Citibank CEO Walter Wriston : "The information about the money is more valuable and important than the money."
- What do they mean by "information management"? Why is it important?



IT and Competitive Strategies

- IT plays an *enabling* and facilitating role in executing competitive strategies.
 - Without e*Logistics, Otis could have not implemented a strategy to become an excellent service provider.
- IT-strategy alignment



More CIOs Are Gaining Stature As Business Strategists