

Week 3: Organizational Strategy, Information Systems, and Competitive Advantage

CB2500 Information Management

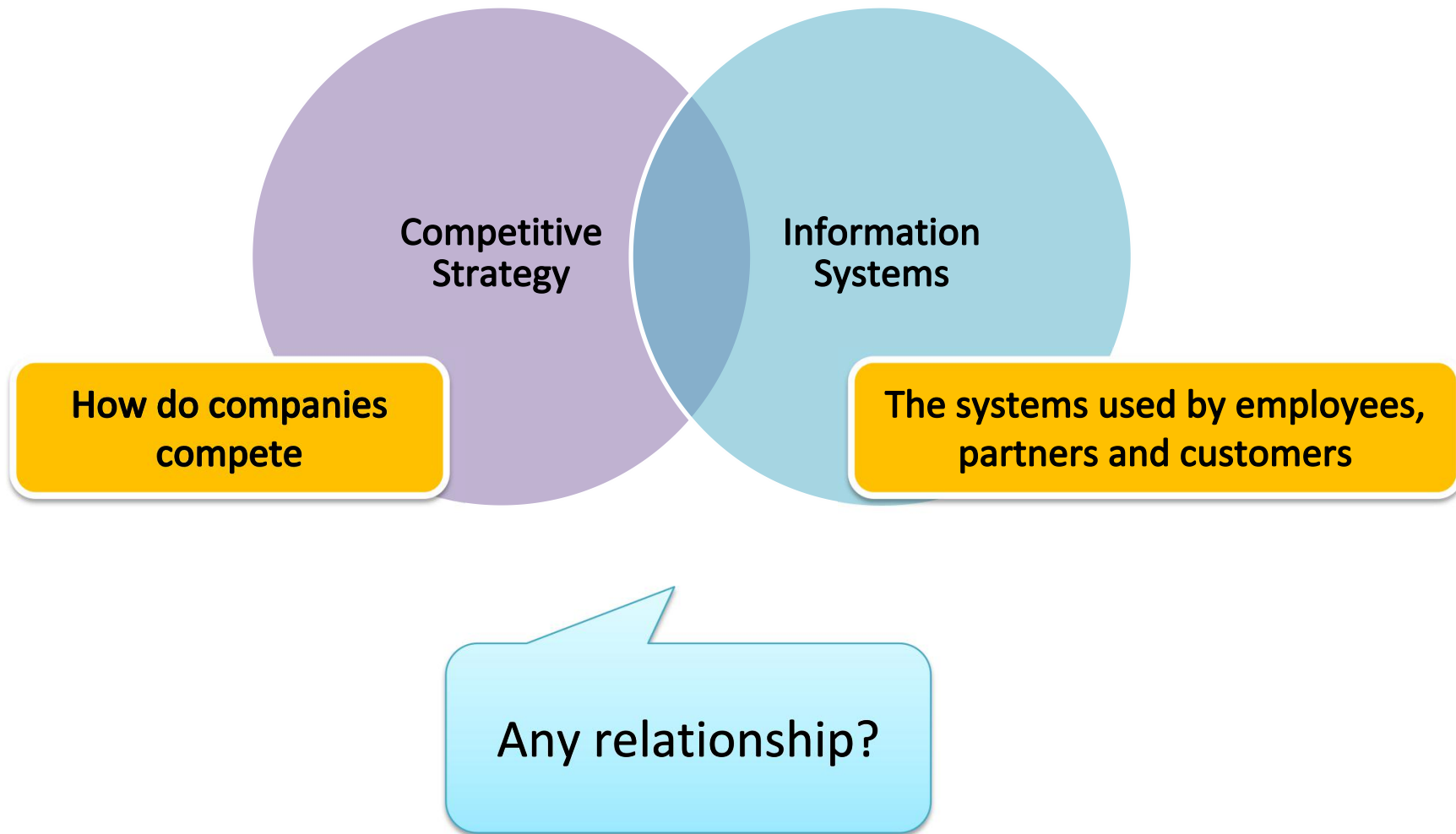
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This Could Happen to You: *"We Can't Be Everything to Everybody."*

- Mateo wants to stay focused on big security contracts
 - Law enforcement agencies, search & rescue, federal government
- Focus or diversify?
 - Good money in agricultural surveying, industrial inspecting, real estate videos, and wedding videos





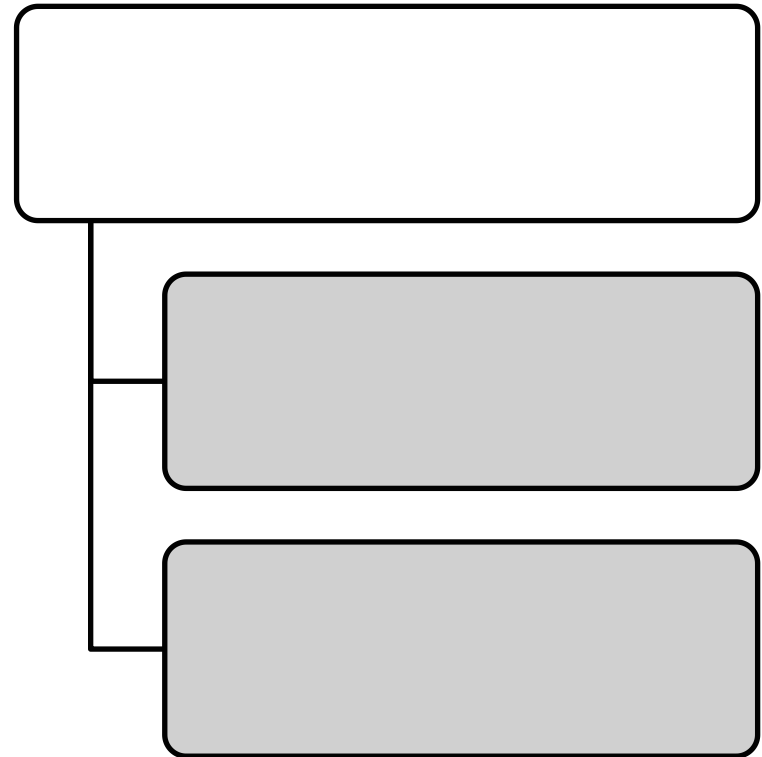
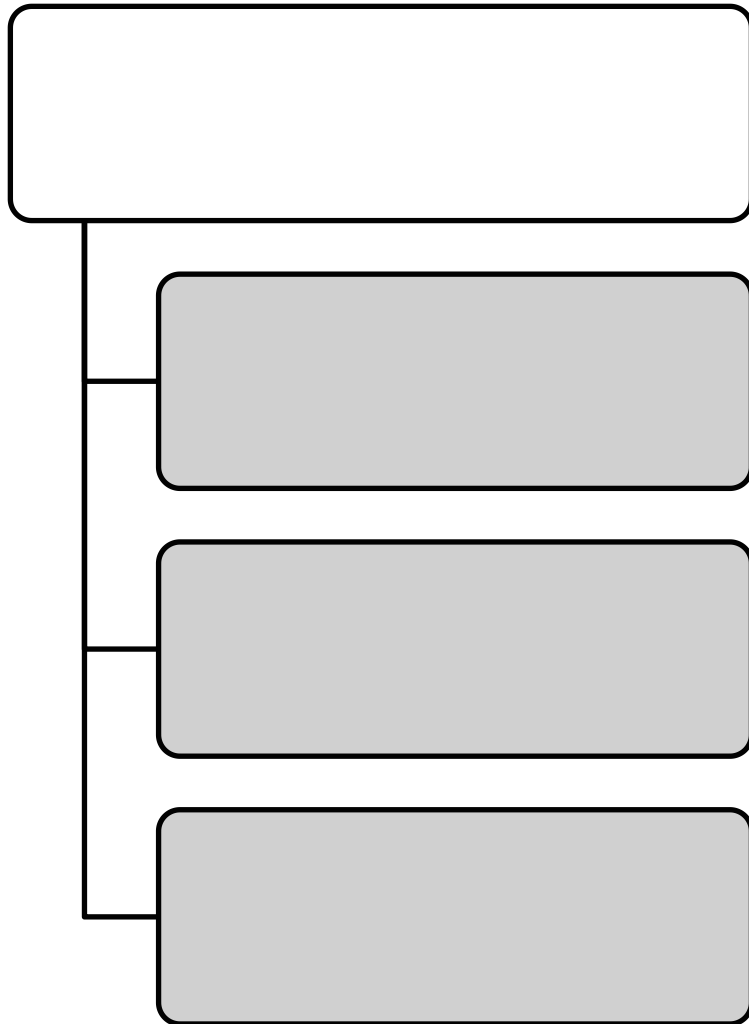
Study Questions / Intended Learning Outcomes

- Q3-1: How does organizational strategy determine information systems structure?
- Q3-2: What five forces determine industry structure?
- Q3-3: What is competitive strategy?
- Q3-4: How does competitive strategy determine value chain structure?
- Q3-5: How do value chains determine business processes and information systems?
- Q3-6: How do information systems provide competitive advantages?

Q3-1: How Does Organizational Strategy Determine Information Systems Structure?



Q3-2: What Five Forces Determine Industry Structure?



Example:

Bargaining Power of Customers

- Toyota buying auto paint
 - Strong or Weak?
- We as students regarding university policies (e.g., tuition/accommodation fees)
 - Strong or Weak?



Example:

Bargaining Power of Suppliers

- Intel Corp. (e.g, CPU products)
 - Strong or weak?



- McDonald's (the fast-food chain restaurant)
 - Strong or weak?



Example: Agritech in Africa



- Video URL: <https://youtu.be/q-SZ0zboJb4>
- Some extra readings: <https://www.ft.com/content/3316885c-b07d-11e8-87e0-d84e0d934341>

UReply Q1

1. Can you identify the suppliers and buyers? What are the products?
2. Is Agrocenta increasing or decreasing farmers bargaining power?
3. What information can farmers obtain from Agrocenta?



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Q3-3: What Is Competitive Strategy?

Lowest cost in providing general counter service?

Industry-wide

Cost

Differentiation

Lowest cost across the industry

Better product/service across the industry

Longer opening hrs?
e.g. Citibank

Focus

Lowest cost in providing investment advice for investment acct holders?

Lowest cost within an industry segment

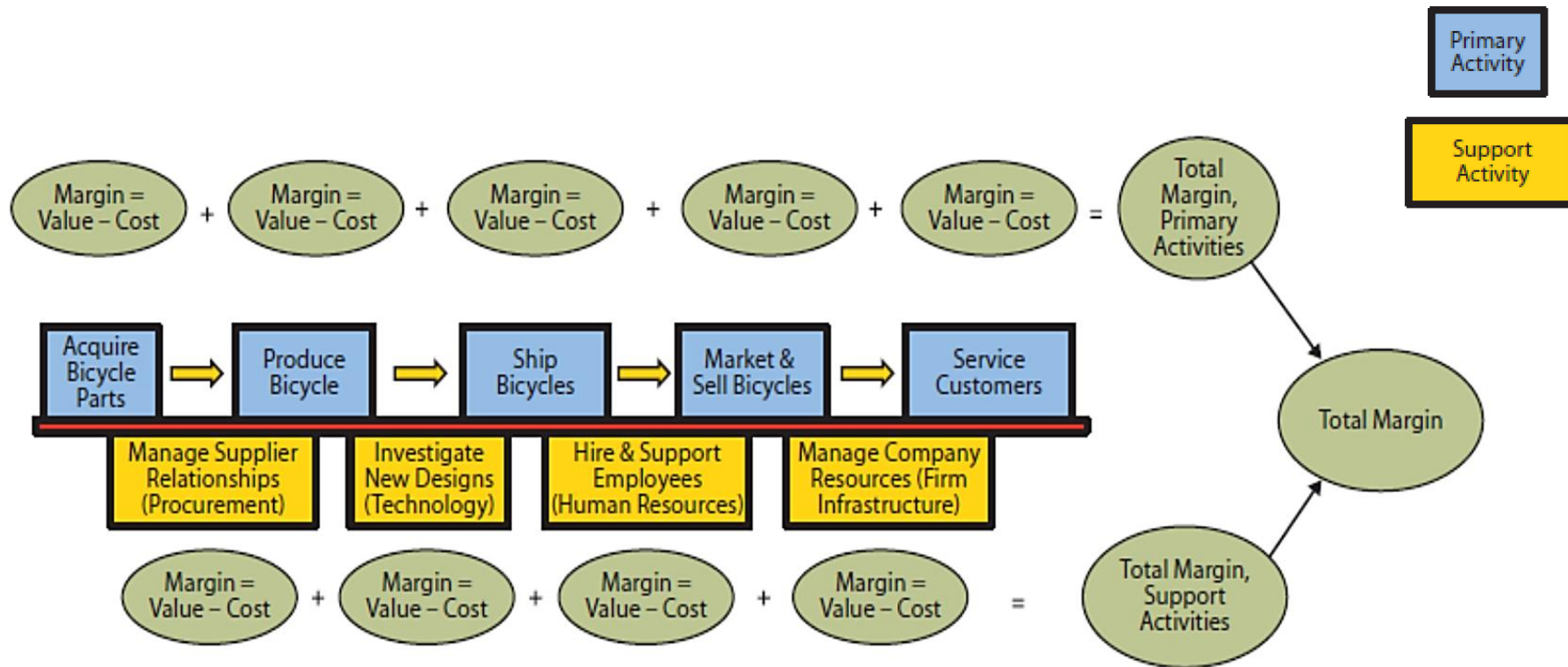
Better product/service within an industry segment

Premier banking for top customers?
E.g. HSBC

Porter's Four Competitive Strategies

Can IS facilitate a company to achieve competitive (cost / differentiation) strategies? How?

Q3-4: How Does Competitive Strategy Determine Value Chain Structure?



Value chain — a network of value-creating primary and support activities

Primary Activities in the Value Chain

Primary Activity	Description
Inbound Logistics	Receiving, storing, and disseminating inputs to the product
Operations/Manufacturing	Transforming inputs into the final product
Outbound Logistics	Collecting, storing, and physically distributing the product to buyers
Sales and Marketing	Inducing buyers to purchase the product and providing a means for them to do so
Customer Service	Assisting customer's use of the product and thus maintaining and enhancing the product's value

Support Activities in the Value Chain

Support Activity	Description
Technology	R & D, New Techniques, Methods, Procedures
Procurement	Raw Materials
Human Resources	Training, Recruiting, Compensation
Firm Infrastructure	General Management, Finance, Accounting, Legal, Government Affairs

Q3-5: How Do Value Chains Determine Business Processes and Information Systems?

- **Business processes** implement value chains or portions of value chains.
- Each value chain supported by **one or more** business process.

Q3-5: How Do Value Chains Determine Business Processes and Information Systems?

	Value Chain Activity	<pre> graph LR A[Greet Customer] --> B[Determine Needs] B --> C[Rent Bike] C --> D[Return Bike & Pay] </pre>			
Low-Cost Rental to Students	Message that implements competitive strategy	"You wanna bike?"	"Bikes are over there. Help yourself."	"Fill out this form, and bring it to me over here when you're done."	"Show me the bike." "OK, you owe \$23.50. Pay up."
	Supporting business process	None.	Physical controls and procedures to prevent bike theft.	Printed forms and a shoebox to store them in.	Shoebox with rental form. Minimal credit card and cash receipt system.

Low-Cost Rental Value Chain

Q3-5: How Do Value Chains Determine Business Processes and Information Systems?

	Value Chain Activity	<pre> graph LR A[Greet Customer] --> B[Determine Needs] B --> C[Rent Bike] C --> D[Return Bike & Pay] </pre>			
High-Service Rental to Business Executives at Conference Resort	Message that implements competitive strategy	"Hello, Ms. Henry. Wonderful to see you again. Would you like to rent the WonderBike 4.5 that you rented last time?"	"You know, I think the WonderBike Supreme would be a better choice for you. It has . . ."	"Let me just scan the bike's number into our system, and then I'll adjust the seat for you."	"How was your ride?" "Here, let me help you. I'll just scan the bike's tag again and have your paperwork in just a second." "Would you like a beverage?" "Would you like me to put this on your hotel bill, or would you prefer to pay now?"
	Supporting business process	Customer tracking and past sales activity system.	Employee training and information system to match customer and bikes, biased to "up-sell" customer.	Automated inventory system to check bike out of inventory.	Automated inventory system to place bike back in inventory. Prepare payment documents. Integrate with resort's billing system.

High-Service Rental Value Chain

Q3-6: How Do Information Systems Provide Competitive Advantages?

Product Implementations

1. Create a new product or service
2. Enhance products or services
3. Differentiate products or services

Process Implementations

4. Lock in customers and buyers
5. Lock in suppliers
6. Raise barriers to market entry
7. Establish alliances
8. Reduce costs

E.g. the Agrocenta case?

shared system, shared info, collecting info

Why is this lecture valuable to you?

- This lecture shows you steps to formulate business strategies
- IS are important to help you realize the business strategies and generate competitive advantages

Week 3 Recap

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References and Disclaimer

- Ch. 3
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