

***Introduction to Operations & Supply Chain Management, 5e (Bozarth)***  
**Chapter 2 Operations and Supply Chain Strategies**

2.1 Elements of the Business

1) Structural elements of a business include:

- A) policies.
- B) people.
- C) decision rules.
- D) computer systems.

Answer: D

Diff: 1

Reference: 2.1 Elements of the Business

Keywords: structural

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

2) A(n) \_\_\_\_\_ is an example of an infrastructural element.

- A) building
- B) organizational structure
- C) office equipment
- D) fleet of delivery trucks

Answer: B

Diff: 1

Reference: 2.1 Elements of the Business

Keywords: infrastructural

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

3) A business is defined by its structural and infrastructural elements.

Answer: TRUE

Diff: 1

Reference: 2.1 Elements of the Business

Keywords: structural, infrastructural

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

4) Policies and decision rules are infrastructural elements.

Answer: TRUE

Diff: 2

Reference: 2.1 Elements of the Business

Keywords: infrastructural, policy, decision rule

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

5) Tangible resources are infrastructural elements in an organization.

Answer: FALSE

Diff: 1

Reference: 2.1 Elements of the Business

Keywords: strategy, operations, supply chain, infrastructural

AACSB: Application of Knowledge

LO: 2.2: Describe the main operations and supply chain decision categories.

6) \_\_\_\_\_ are tangible resources such as buildings, equipment, and computer systems.

Answer: Structural elements

Diff: 1

Reference: 2.1 Elements of the Business

Keywords: structural element

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

7) \_\_\_\_\_ are the people, policies, and organizational structure choices made by a firm.

Answer: Infrastructural elements

Diff: 1

Reference: 2.1 Elements of the Business

Keywords: infrastructural element

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

8) Define and describe the differences between structural and infrastructural elements of a business.

Answer: **Structural elements** are tangible resources, such as buildings, equipment, and information technology. These resources typically require large capital investments that are difficult to reverse. Because of their cost and inflexibility, such elements are changed infrequently and only after much deliberation. In contrast, **infrastructural elements** are the people, policies, decision rules, and organizational structure choices made by the firm. These elements are, by definition, not as visible as structural elements, but they are just as important.

Diff: 3

Reference: 2.1 Elements of the Business

Keywords: infrastructural element, structural element

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

## 2.2 Strategy

1) The firm's targeted customers, time frames, and performance objectives are identified by their:

- A) mission statement.
- B) core competencies.
- C) business strategy.
- D) functional strategy.

Answer: C

Diff: 1

Reference: 2.2 Strategy

Keywords: business strategy

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

2) Core competencies can be described as:

- A) a declaration of mission that is focused on specific skills.
- B) organizational strengths and abilities that have been developed over time.
- C) only those processes that create products or provide services.
- D) elements of the supply chain that create value.

Answer: B

Diff: 2

Reference: 2.2 Strategy

Keywords: core competency

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

3) The success of a strategy depends on doing many things well and:

- A) adjusting the company mission to match what you excel at.
- B) performing at a high level.
- C) doing them better than your competitors.
- D) integrating among them.

Answer: D

Diff: 2

Reference: 2.2 Strategy

Keywords: strategy

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

4) Which of the following statements about functional strategies is best?

- A) Functional strategies determine the mission statement.
- B) Functional strategies determine the overall business strategy.
- C) Many functional level strategies could readily be described as cross-functional.
- D) A firm's operations and supply chain strategy is more important than their marketing, finance and engineering strategies.

Answer: C

Diff: 2

Reference: 2.2 Strategy

Keywords: functional strategy, cross-functional

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

5) No one could turn around a failing restaurant as expertly as Gordon, whose experience and cadre of trained professionals was available at a moment's notice should his services be needed. This ability, some might call it a gift, was developed to such a level that other restaurant consultants were unable to match his results. This ability is best described as his:

- A) business strategy.
- B) core competency.
- C) mission statement.
- D) operations and supply chain strategy.

Answer: B

Diff: 2

Reference: 2.2 Strategy

Keywords: core competency

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

6) A mechanism that identifies a firm's targeted customers and sets time frames and performance objectives for the business is called a mission statement.

Answer: FALSE

Diff: 2

Reference: 2.2 Strategy

Keywords: strategy, mission statement

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

7) The mission statement addresses a company's reason for existence, core values, and domain.

Answer: TRUE

Diff: 2

Reference: 2.2 Strategy

Keywords: mission statement

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

8) As long as each functional area in a company operates efficiently, their strategies can be very different.

Answer: FALSE

Diff: 1

Reference: 2.2 Strategy

Keywords: strategy, function, functional area

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

9) In general, core competencies drive functional strategies.

Answer: TRUE

Diff: 2

Reference: 2.2 Strategy

Keywords: core competency

AACSB: Application of Knowledge

LO: 2.6: Define core competencies and give an example of how core competencies in the operations and supply chain areas can be used for competitive advantage.

10) A business's core competencies can shift over time.

Answer: TRUE

Diff: 2

Reference: 2.2 Strategy

Keywords: core competency

AACSB: Application of Knowledge

LO: 2.6: Define core competencies and give an example of how core competencies in the operations and supply chain areas can be used for competitive advantage.

11) A firm's \_\_\_\_\_ explains why an organization exists.

Answer: mission statement

Diff: 1

Reference: 2.2 Strategy

Keywords: mission statement

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

12) Organizational strengths or abilities, developed over a long period of time that customers find valuable and competitors find difficult or impossible to copy are \_\_\_\_\_.

Answer: core competencies

Diff: 1

Reference: 2.2 Strategy

Keywords: core competency, competency

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

13) When you translate an overall business strategy into a level of detail suitable for the marketing area, you create a(n) \_\_\_\_\_.

Answer: functional strategy

Diff: 1

Reference: 2.2 Strategy

Keywords: functional strategy

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

14) A \_\_\_\_\_ is an organizational strength that customers value and competitors have great difficulty duplicating.

Answer: core competency

Diff: 2

Reference: 2.2 Strategy

Keywords: closing the loop, strategy, core competencies

AACSB: Application of Knowledge

LO: 2.6: Define core competencies and give an example of how core competencies in the operations and supply chain areas can be used for competitive advantage.

15) Define mission statement and business strategy and describe the relationship between the two.

Answer: A mission statement explains why an organization exists. It describes what is important to the organization, called its core values, and identifies the organization's domain. A business strategy identifies the firm's targeted customers and sets time frames and performance objectives for the business. The mission statement provides a more global picture, while the business strategy addresses who the targeted customers and markets are, areas of sustainable competitive advantage, the role of supply chain partners, and time frames and performance objectives.

Diff: 2

Reference: 2.2 Strategy

Keywords: mission statement, business strategy, strategy

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

16) Offer a definition of the term core competency and explain the core competency of your university.

Answer: Core competencies are organizational strengths or abilities, developed over a long period of time, that customers find valuable and competitors find difficult or even impossible to copy. Answers regarding the core competency of the university will vary.

Diff: 2

Reference: 2.2 Strategy

Keywords: closing the loop, strategy, core competencies

AACSB: Application of Knowledge

LO: 2.6: Define core competencies and give an example of how core competencies in the operations and supply chain areas can be used for competitive advantage.

17) What is the core competency of Amazon? Defend your choice. Has Amazon's core competency changed since its founding in the early 1990's?

Answer: Answers may vary, but Amazon's core competency seems to be fulfillment, i.e., the ability to deliver what the customer wants in the right amount in a timely fashion. Amazon has a sophisticated warehouse system and distribution network that positions products close to the customer in the United States. In its early years, Amazon provided only books and was known more for low prices than rapid fulfillment.

Diff: 2

Reference: 2.2 Strategy

Keywords: closing the loop, strategy, core competencies

AACSB: Application of Knowledge

LO: 2.6: Define core competencies and give an example of how core competencies in the operations and supply chain areas can be used for competitive advantage.

## 2.3 Operations and Supply Chain Strategies

1) Which of these is NOT one of the primary objectives of an operations and supply chain strategy?

A) To help management choose the right mix of structural and infrastructural elements, based on a clear understanding of the performance dimensions valued by customers and the trade-offs involved.

B) To ensure that the firm's structural and infrastructural choices are strategically aligned with the firm's business strategy.

C) To support the development of core competencies in the firm's operations and supply chains.

D) To align structural and infrastructural elements to convert order winners into order qualifiers as determined by the mission statement.

Answer: D

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: functional strategy, operations, supply chain

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

2) Which of these is a major operations and supply chain structural decision category?

A) organization

B) planning and control

C) capacity

D) product and service development

Answer: C

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: structural decision

AACSB: Application of Knowledge

LO: 2.2: Describe the main operations and supply chain decision categories.

3) Which of these is a major operations and supply chain infrastructural decision category?

- A) organization
- B) facilities
- C) capacity
- D) technology

Answer: A

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: infrastructural decision

AACSB: Application of Knowledge

LO: 2.2: Describe the main operations and supply chain decision categories.

4) Damron Inc. wants to purchase a shear for their sheet metal shop and chooses dimensions of cost, reliability, and flexibility as critical to their long term success. They evaluate three different shears and rate their performance on each criterion on a scale from 1 (poor) to 5 (excellent). What is the value index for the shear made by Belsky Manufacturing?

Dimension	Importance	Belsky Mfg.	Reber Ind.	Floyd Co.
Cost	4	1	5	3
Reliability	2	5	2	1
Flexibility	3	3	3	4

- A) 9
- B) 18
- C) 23
- D) 81

Answer: C

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: value index

AACSB: Analytical Thinking

LO: 2.3: Explain the concept of customer value and calculate a value index score.

5) Damron Inc. wants to purchase a shear for their sheet metal shop and chooses dimensions of cost, reliability, and flexibility as critical to their long term success. They evaluate four different shears and rate their performance on each criterion on a scale from 1 (poor) to 5 (excellent). Which shear should be purchased?

Dimension	Importance	Belsky Mfg.	Reber Ind.	Estelle LLC	Floyd Co.
Cost	4	4	4	3	3
Reliability	2	3	2	3	1
Flexibility	3	2	3	3	4

- A) Belsky
- B) Reber
- C) Estelle
- D) Floyd

Answer: B

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: value index

AACSB: Analytical Thinking

LO: 2.3: Explain the concept of customer value and calculate a value index score.

6) Electra wants to purchase a laptop for use in her MBA program so she can work on assignments and surf the web while the professor drones on endlessly. After consulting with her colleagues, she chooses the dimensions of cost, weight, processor speed, and touchscreen capability as critical to her long term success and amusement. She evaluates four different laptops and rates their performance on each criterion on a scale from 1 (poor) to 5 (excellent). Which laptop should Electra purchase?

Dimension	Importance	Sir Face	Toybook Air	Knockoff	High Priced
Weight	3	4	4	3	5
Speed	5	4	4	4	3
Cost	2	2	2	5	1
Touchscreen	1	5	2	3	3

- A) Sir Face
- B) Toybook Air
- C) Knockoff
- D) High Priced

Answer: C

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: value index

AACSB: Analytical Thinking

LO: 2.3: Explain the concept of customer value and calculate a value index score.

7) Electra wants to purchase a laptop for use in her MBA program so she can work on assignments and surf the web while the professor drones on endlessly. After consulting with her colleagues, she chooses the dimensions of cost, weight, processor speed, and touchscreen capability as critical to her long term success and amusement. She evaluates four different laptops and rates their performance on each criterion on a scale from 1 (poor) to 5 (excellent). She is struggling with her assessment of the importance of the Cost criterion. As an avid lottery player, she is pretty sure that tonight's drawing will mean at least two numbers match on the ticket she bought on the way to class and it could possibly mean a three-number match. Given her uncertainty, she would like to choose the laptop that performs the best overall across the entire spectrum of possibilities of the outcome of tonight's lottery. Which would you recommend?

Dimension	Importance	Sir Face	Toybook Air	Knockoff	High Priced
Weight	3	4	4	3	5
Speed	5	4	4	4	3
Cost	??	2	4	5	1
Touchscreen	1	5	2	3	3

- A) High Priced
- B) Knockoff
- C) Toybook Air
- D) Sir Face

Answer: B

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: value index

AACSB: Analytical Thinking

LO: 2.3: Explain the concept of customer value and calculate a value index score.

8) Which of the following is NOT a generic performance dimension of operations and supply chain activities?

- A) quality
- B) time
- C) flexibility
- D) social responsibility

Answer: D

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: performance, quality, time, flexibility

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

9) Whether the product was made or service performed to specifications is a question of:

- A) conformance quality.
- B) performance quality.
- C) reliability quality.
- D) value indices.

Answer: A

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: conformance quality

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

10) Which of these statements about time performance is best?

- A) A supplier with high delivery speed must have high delivery reliability.
- B) A customer with a narrow delivery window should have a supplier with high delivery reliability.
- C) A supplier with low delivery reliability must have low delivery speed.
- D) A customer with a wide delivery window should have a supplier with low delivery reliability.

Answer: B

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: delivery reliability, delivery speed

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

11) Lieutenant Columbo donned his raincoat and hopped into his 1959 Peugeot, hot on the trail of another condescending millionaire murder suspect. The Peugeot always drew stares, not because it was a rare automobile, but because it was an eyesore. It had one redeeming quality; every time he sat behind the wheel and turned the key in the ignition, it would start. Thus, the car scored well on the:

- A) mix flexibility scale.
- B) changeover flexibility scale.
- C) reliability quality scale.
- D) delivery reliability scale.

Answer: C

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: reliability quality

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

12) We have all experienced the endless wait for repair technicians to show up at our house. If the cable company would provide an estimate of "Your installer will arrive at your house between 2 pm and 3 pm on Wednesday," instead of "Your installer will arrive at your house between 8 am and 5 pm on Wednesday," we would be impressed with their service and their:

- A) performance quality.
- B) delivery speed.
- C) delivery reliability.
- D) delivery window.

Answer: D

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: delivery window

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

13) The ability to produce a wide range of products or services is:

- A) mix flexibility.
- B) changeover flexibility.
- C) volume flexibility.
- D) run flexibility.

Answer: A

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: mix flexibility

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

14) Which type of flexibility would be the most difficult to achieve for a two-chair barbershop?

- A) mix flexibility
- B) changeover flexibility
- C) volume flexibility
- D) run flexibility

Answer: C

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: volume flexibility

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

15) Mutt's Amazing Dogs offers a hot dog with mustard and a hot dog with relish and mustard. The difference between the two (the relish) is achieved by flipping a single lever, which changes the dispenser from mustard, to a perfectly proportioned mix of relish and mustard. This lever responds instantly to the feathery touch of Mutt, who provides his customers a high level of:

- A) mix flexibility.
- B) volume flexibility.
- C) delivery flexibility.
- D) changeover flexibility.

Answer: D

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: changeover flexibility

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

16) Performance dimensions on which customers expect a minimum level of performance are called:

- A) order winners.
- B) minimum performers.
- C) recommended daily allowances.
- D) order qualifiers.

Answer: D

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: order qualifier

AACSB: Application of Knowledge

LO: 2.4: Differentiate between order winners and qualifiers and explain why this difference is important to developing the operations and supply chain strategy for a firm.

17) Four engineering firms completed the request for proposal to develop something called the Arpanet, but the firm of Bolt Beranek and Newman demonstrated a camaraderie and tighter team concept that proved to be the \_\_\_\_\_ that resulted in their selection to develop a four node network that became the Internet.

- A) order winners
- B) minimum performers
- C) recommended daily allowances
- D) order qualifiers

Answer: A

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: order winner

AACSB: Application of Knowledge

LO: 2.4: Differentiate between order winners and qualifiers and explain why this difference is important to developing the operations and supply chain strategy for a firm.

18) The latex division of Vandelay Industries provided support after the sale that could not be matched by any of the other players in the latex industry. This unique attribute was responsible for perhaps 60% of their sales volume and could be described as:

- A) a trade-off.
- B) a core competency.
- C) an order winner.
- D) externally neutral.

Answer: C

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: order winner

AACSB: Application of Knowledge

LO: 2.4: Differentiate between order winners and qualifiers and explain why this difference is important to developing the operations and supply chain strategy for a firm.

19) Department chair Robert knew that his Entrepreneurship major was destined to be successful. Yes, he had sacrificed many of the features like qualified faculty and captivating guest speakers for lower course fees that made this the least expensive program in the entire college, which was a popular notion in today's tough economic times. Once enrollment blossomed, he would feel:

- A) his trade-off was validated.
- B) his core competency was mix flexibility.
- C) his order winner was now a qualifier.
- D) the need for an updated mission statement.

Answer: A

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: trade-off

AACSB: Application of Knowledge

LO: 2.5: Discuss the concept of trade-offs and give an example.

20) Which of these strategic moves represents a trade-off?

- A) Art Vandelay decides to quit exporting and focus just on importing.
- B) Wealthy industrialist H.E. Pennypacker decides to open a silver mine rather than an iron mine.
- C) J Peterman opts for delivery speed in lieu of product mix variety in his fall catalog.
- D) Kenny Bania believes that they should change the name from Ovaltine to Roundtine.

Answer: C

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: trade-off

AACSB: Application of Knowledge

LO: 2.5: Discuss the concept of trade-offs and give an example.

21) *Closing the loop* in the area of business strategy means that:

- A) core competencies at the functional level feed back into the business strategy.
- B) the mission statement is used to develop the business strategy.
- C) the business strategy is translated into operations and supply chain actions.
- D) other functional strategies, such as those of the marketing and finance functions are aligned with the operations and supply chain strategy.

Answer: A

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: closing the loop, business strategy

AACSB: Application of Knowledge

LO: 2.6: Define core competencies and give an example of how core competencies in the operations and supply chain areas can be used for competitive advantage.

22) When the operations and supply chain areas are not linked with the overall business strategy, but instead follow industry practices, the firm is in this stage of alignment.

- A) internally neutral
- B) externally neutral
- C) internally supportive
- D) externally supportive

Answer: B

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: externally neutral, strategy, alignment

AACSB: Application of Knowledge

LO: 2.7: Explain the importance of strategic alignment and describe the four stages of alignment between the operations and supply chain strategy and the business strategy.

23) Before firms can progress to the fourth stage of alignment, they must not only support business strategies but also:

- A) exploit core competencies.
- B) develop a new mission statement.
- C) develop order winners.
- D) abandon order qualifiers.

Answer: A

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: core competency, externally supportive, alignment

AACSB: Application of Knowledge

LO: 2.7: Explain the importance of strategic alignment and describe the four stages of alignment between the operations and supply chain strategy and the business strategy.

24) An operations and supply chain strategy is a functional strategy that is, by definition, an infrastructural strategy.

Answer: FALSE

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: strategy, operations, supply chain, infrastructural

AACSB: Application of Knowledge

LO: 2.2: Describe the main operations and supply chain decision categories.

25) Conformance quality addresses whether the product was made or the service performed to specifications.

Answer: TRUE

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: conformance quality

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

26) If a logistics firm consistently makes deliveries within the agreed-upon delivery window, they are exhibiting delivery reliability.

Answer: TRUE

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: delivery reliability

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

27) Changeover flexibility refers to the ability of a company to change production quickly from one product to another with a minimal downtime in production.

Answer: TRUE

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: changeover flexibility

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

28) Volume flexibility is the term used to describe the ability of a producer to produce a dazzling (wide) array of products or services.

Answer: FALSE

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: mix flexibility, volume flexibility

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

29) "I've never seen flavored marshmallows this size before!" Alice squealed as she emptied the shelves at the local grocery store. The rest of the shoppers would have to make do with the other seventy bags of miniature and standard-size marshmallows during this winter's hot chocolate festival. For Alice, the jumbo size feature is an order winner.

Answer: TRUE

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: order winner, order qualifier

AACSB: Application of Knowledge

LO: 2.4: Differentiate between order winners and qualifiers and explain why this difference is important to developing the operations and supply chain strategy for a firm.

30) Your employer prepares a request for proposal that describes in vivid detail all of the capabilities that a new computer system should possess. A software product that can meet this request for proposal has performance characteristics that can be described as order qualifiers.

Answer: TRUE

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: order qualifier

AACSB: Application of Knowledge

LO: 2.4: Differentiate between order winners and qualifiers and explain why this difference is important to developing the operations and supply chain strategy for a firm.

31) Darrell and Dave were fierce competitors, which drove both of them to overpay for many of their inputs, resulting in increased prices at their own stores. Dave realized this, and pondered how he could be recognized as a cost leader by his customers and maintain his reputation for quality merchandise. Sacrificing one element of his strategy at the expense of another is recognized as a trade-off in operations management.

Answer: TRUE

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: trade-off

AACSB: Application of Knowledge

LO: 2.5: Discuss the concept of trade-offs and give an example.

32) A logical tradeoff is sacrificing an order winner capability in favor of an order qualifier capability.

Answer: FALSE

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: trade-off

AACSB: Application of Knowledge

LO: 2.5: Discuss the concept of trade-offs and give an example.

33) The phrase "closing the loop" means that strengths and weaknesses, as well as core competencies are fed back into the mission statement.

Answer: FALSE

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: closing the loop, strategy, core competencies

AACSB: Application of Knowledge

LO: 2.6: Define core competencies and give an example of how core competencies in the operations and supply chain areas can be used for competitive advantage.

34) In the internally supportive stage of business strategy alignment, management merely attempts to minimize negative potential in the operations and supply chain area.

Answer: FALSE

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: strategy, alignment, internally-neutral

AACSB: Application of Knowledge

LO: 2.7: Explain the importance of strategic alignment and describe the four stages of alignment between the operations and supply chain strategy and the business strategy.

35) You decide to open a bookstore with a wide selection, comfortable seating, and an internal coffee shop because it has worked very well for other bookstores you have visited. Your strategy could be described as externally neutral.

Answer: TRUE

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: strategy, alignment, externally neutral

AACSB: Application of Knowledge

LO: 2.7: Explain the importance of strategic alignment and describe the four stages of alignment between the operations and supply chain strategy and the business strategy.

36) The externally supportive stage of alignment is more desirable than the externally neutral stage of alignment.

Answer: TRUE

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: strategy, alignment, externally neutral, externally supportive

AACSB: Application of Knowledge

LO: 2.7: Explain the importance of strategic alignment and describe the four stages of alignment between the operations and supply chain strategy and the business strategy.

37) Decisions about capacity, facilities and technology fall in the \_\_\_\_\_ decision category?

Answer: structural

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: structural decision

AACSB: Application of Knowledge

LO: 2.2: Describe the main operations and supply chain decision categories.

38) Decisions about planning and control, sourcing, and quality management fall in the \_\_\_\_\_ decision category.

Answer: infrastructural

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: infrastructural decision

AACSB: Application of Knowledge

LO: 2.2: Describe the main operations and supply chain decision categories.

39) One way to quantify the overall value of an item or service to a customer is by using a(n) \_\_\_\_\_.

Answer: value index

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: value index

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

40) The American-made car I purchased as a starving graduate student was not the sleek, high-performance machine that full professors park in faculty parking, but it performed admirably. For the next twenty years I could count on one thing; every morning it would start when I turned the key. This vehicle had outstanding \_\_\_\_\_ quality.

Answer: reliability

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: reliability quality

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

41) The ability to produce a wide range of products or services is referred to as \_\_\_\_\_.

Answer: mix flexibility

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: mix flexibility

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

42) Between order qualifiers and order winners, superior performance on a(n) \_\_\_\_\_ will not, by itself, give a company a competitive advantage.

Answer: order qualifier

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: order qualifier

AACSB: Application of Knowledge

LO: 2.4: Differentiate between order winners and qualifiers and explain why this difference is important to developing the operations and supply chain strategy for a firm.

43) A major retailer wants to sell items as cheaply as possible while maintaining an attractive and enjoyable shopping atmosphere. Spending too much on ambience will raise prices and drive away shoppers but spending too little will drive shoppers away also. Clearly, the retailer is faced with a(n) \_\_\_\_\_ between cost and aesthetic quality.

Answer: trade-off

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: trade-off

AACSB: Application of Knowledge

LO: 2.5: Discuss the concept of trade-offs and give an example.

44) A trade-off is at its core, a change in emphasis between two \_\_\_\_\_ dimensions.

Answer: performance

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: trade-off, performance dimension

AACSB: Application of Knowledge

LO: 2.5: Discuss the concept of trade-offs and give an example.

45) At the \_\_\_\_\_ stage of alignment, the business strategy seeks to exploit core competencies found within the operations and supply areas.

Answer: externally supportive

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: alignment, externally supportive

AACSB: Application of Knowledge

LO: 2.7: Explain the importance of strategic alignment and describe the four stages of alignment between the operations and supply chain strategy and the business strategy.

46) The operations and supply chain strategy wasn't aligned with the business strategy nor the mission, so management could only hope to minimize the damage the operations function caused. This \_\_\_\_\_ stage was targeted for improvement next year.

Answer: internally neutral

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: internally neutral, strategy, alignment

AACSB: Application of Knowledge

LO: 2.7: Explain the importance of strategic alignment and describe the four stages of alignment between the operations and supply chain strategy and the business strategy.

47) Before firms can think about progressing to the fourth stage of alignment (\_\_\_\_\_), they must develop \_\_\_\_\_ within the operations and supply chain areas.

Answer: externally supportive; core competencies

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: externally supportive, core competencies, strategy, alignment

AACSB: Application of Knowledge

LO: 2.7: Explain the importance of strategic alignment and describe the four stages of alignment between the operations and supply chain strategy and the business strategy.

48) What are the three primary objectives of an operations and supply chain strategy?

Answer: The three primary objectives of an operations and supply chain strategy are: 1) To help management choose the right mix of structural and infrastructural elements, based on a clear understanding of the performance dimensions valued by customers and the trade-offs involved; 2) To ensure that the firm's structural and infrastructural choices are strategically aligned with the firm's business strategy; and 3) To support the development of core competencies in the firm's operations and supply chains.

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: operations, supply chain, strategy

AACSB: Application of Knowledge

LO: 2.1: Explain the relationship between business strategies and functional strategies and the difference between structural and infrastructural elements of the business.

49) What are three structural and three infrastructural decision categories in operations and supply chain management? Pick one from each category and provide an example of a choice that an operations and supply chain manager might make.

Answer: The authors identify capacity, facilities and technology as the structural decision categories. The authors identify five infrastructural decision categories — organization, sourcing and purchasing process decisions, planning and control, business processes and quality management, and product and service development. Examples will vary; for structural decisions, the manager might decide on building size or the number of locations for capacity; the degree of centralization for facilities; and the level of automation for technology. In the infrastructural category, the decision pairs include organization-compensation/reward system, sourcing-supplier selection/screening, planning-forecasting, business processes-six sigma, product/service development-supplier roles.

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: decision categories

AACSB: Application of Knowledge

LO: 2.2: Describe the main operations and supply chain decision categories.

50) Which category of decision categories in operations and supply chain management requires the greatest financial investment? Justify your answer.

Answer: The greatest financial investment is required for structural elements, which are largely tangible resources. The infrastructural elements are largely policy and decision rules, which in general can be changed on much shorter notice and with substantially smaller financial investment.

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: decision categories

AACSB: Application of Knowledge

LO: 2.2: Describe the main operations and supply chain decision categories.

51) Modelo, S.A., is considering three providers of automated visual inspection systems for their packaging needs. A team of manufacturing engineers, production managers, and process engineers has developed the following list of criteria and assigned them ratings on a scale of 1 (completely unimportant) to 5 (critical). This team has also rated the candidate products on each of these dimensions using a scale of 1 (poor) to 5 (excellent). Which provider should they choose and what caveats, if any, should go with their recommendation?

Dimension	Importance	Provider A	Provider B	Provider C
4 megapixels	5	4	5	5
Minimal fringing	3	4	3	2
15 fps VGA movie mode	4	4	4	1
Minimal shutter lag	2	2	5	5
Works in dim light	1	2	3	4
Water resistant	5	5	2	1

Answer: The highest score using the customer value index is obtained by Provider A.

$$V = \sum_{i=1}^N I_n \times P_n$$

$$V_A = 5 \times 4 + 3 \times 4 + 4 \times 4 + 2 \times 2 + 1 \times 2 + 5 \times 5 = 79$$

$$V_B = 5 \times 5 + 3 \times 3 + 4 \times 4 + 2 \times 5 + 1 \times 3 + 5 \times 2 = 73$$

$$V_C = 5 \times 5 + 3 \times 2 + 4 \times 1 + 2 \times 5 + 1 \times 4 + 5 \times 1 = 54$$

Caveats to this technique are the methods used to assign an importance rating to each of the criteria and scores to each of the providers. A slight switch in ratings or scores could swing the choice from Provider A to Provider B, for example, an increase in importance of the Minimal shutter lag criterion from a 2 to a 4 will put the two products in a tie.

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: value index

AACSB: Analytical Thinking

LO: 2.3: Explain the concept of customer value and calculate a value index score.

52) Electra wants to purchase a laptop for use in her MBA program so she can work on assignments and surf the web while the professor drones on endlessly. After consulting with her colleagues, she chooses the dimensions of cost, weight, processor speed, and touchscreen capability as critical to her long term success and amusement. She evaluates four different laptops and rates their performance on each criterion on a scale from 1 (poor) to 5 (excellent). She is struggling with her assessment of the importance of the Cost criterion. As an avid lottery player, she is pretty sure that tonight's drawing will result in at least a two number match on the ticket she bought on the way to class and it could mean a three-number match. Given her uncertainty, she would like to choose the laptop that performs the best overall across the entire spectrum of possibilities of the outcome of tonight's lottery. Which would you recommend?

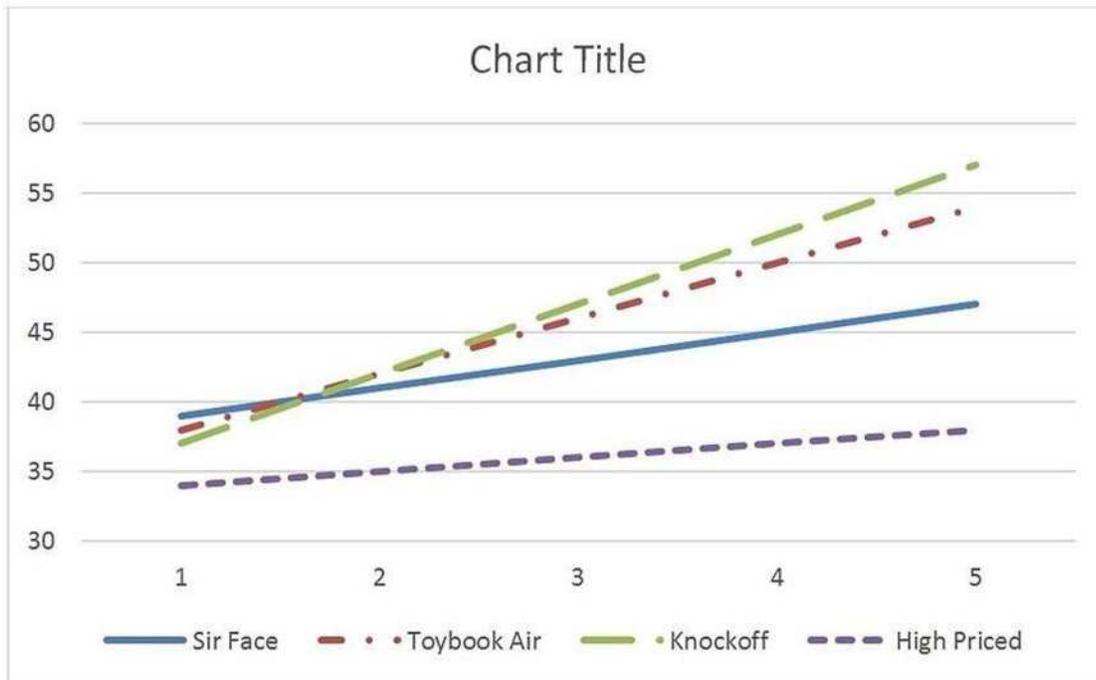
Dimension	Importance	Sir Face	Toybook Air	Knockoff	High Priced
Weight	3	4	4	3	5
Speed	5	4	4	4	3
Cost	??	2	4	5	1
Touchscreen	1	5	2	3	3

Answer: The most robust choice is the Knockoff, as it is the top-ranked alternative for four of the five possible importance weights for the Cost criterion. Not only does it perform well in four out of the five possible values, but it should be noted that it does so in the most likely outcomes of the lottery drawing this evening. It is highly likely that Electra will not win the lottery, and assuming Electra is a financially-strapped student, the Cost criterion should probably be weighted as a 5 (losing lottery, so money is tight) than as a 1 (winning lottery and therefore cost is not an important consideration).

This table shows the value index for each alternative under the five different importance values for the cost criterion. Highest scores are highlighted.

Cost Level	Sir Face	Toybook Air	Knockoff	High Priced
1	39	38	37	34
2	41	42	42	35
3	43	46	47	36
4	45	50	52	37
5	47	54	57	38

Alternatively, the data in this table can be graphed to illustrate the preference shift as the importance of cost varies.



Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: value index

AACSB: Analytical Thinking

LO: 2.3: Explain the concept of customer value and calculate a value index score.

53) Discuss the different types of flexibility that a producer can exhibit. Use any company mentioned in the chapter and provide an example of each.

Answer: Many firms distinguish among several types of flexibility, including **mix flexibility** (the ability to produce a wide range of products or services), **changeover flexibility** (the ability to provide a new product with minimal delay), and **volume flexibility** (the ability to produce whatever volume the customer needs). Examples will vary.

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: mix flexibility, changeover flexibility, volume flexibility

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

54) Describe the four generic performance dimensions of operations and supply chain activities.

Answer: The four generic performance dimensions of operations and supply chain activities are quality, time, flexibility, and cost. Quality includes all characteristics of a product or service that bear on its ability to satisfy stated or implied needs. Time has two basic characteristics: speed and reliability. Flexibility is a performance dimension that considers how quickly operations and supply chains can respond to the unique needs of customers. Cost covers a wide range of activities that companies categorize in many ways; typical cost categories include labor cost, material cost, engineering cost, and quality-related costs.

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: operations, supply chain, performance

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

55) What are the differences between performance, conformance, and reliability dimensions of quality?  
 Answer: Performance quality addresses the basic operating characteristics of the product or service. Conformance quality addresses whether the product was made or the service performed to specifications. Reliability addresses whether a product will work for a long time without failing or requiring maintenance.

Diff: 1

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: conformance quality, reliability quality, conformance quality

AACSB: Application of Knowledge

LO: 2.3: Explain the concept of customer value and calculate a value index score.

56) A university is evaluating options for an enterprise information system to replace their antiquated systems. The CIO has developed the following criteria:

At a minimum, the system (or system provider) must be capable of:

Technical support available 24/7

Have successfully installed and maintained systems in universities of similar size.

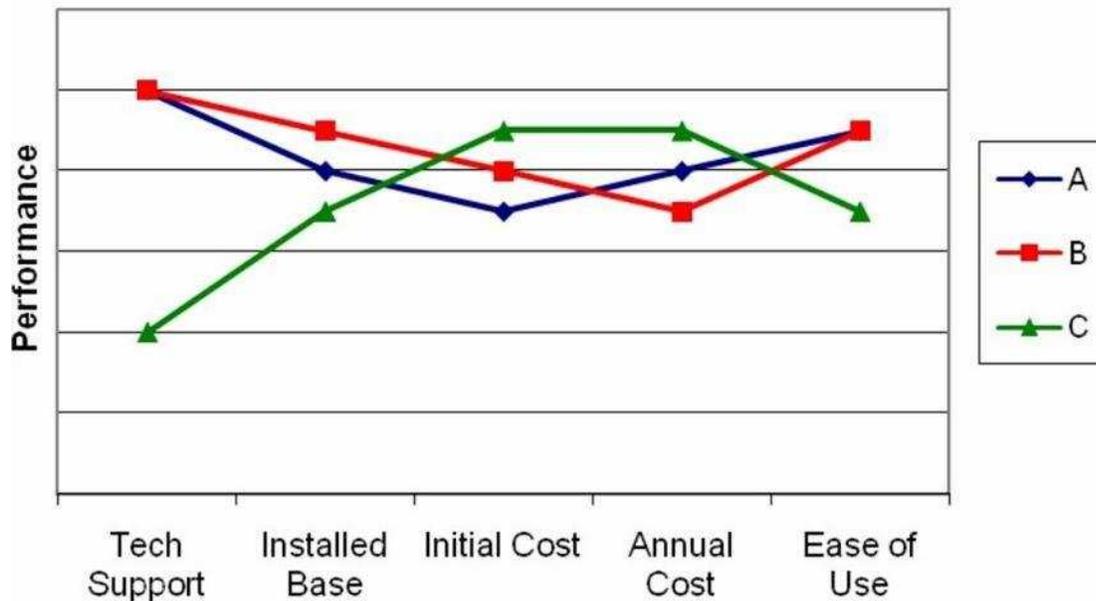
Beyond this, systems will be evaluated according to initial cost, annual maintenance and support costs, and ease of use.

The three companies that are vying for the university's business supplied the following information about their performance on these criteria.

<b>Criterion</b>	<b>A</b>	<b>B</b>	<b>C</b>
Tech support 24/7	24/7	24/7	8-5 M-F
Installed base	3 installations	7 installations	1 installation
Initial cost	\$2.3 million	\$1.9 million	\$1.25 million
Annual cost	\$100K	\$125K	\$75K
Ease of use	20 hours training	20 hours training	40 hours training

Create and analyze a graph showing each competitor's performance with regards to order winners and order qualifiers. Which firm should get the business and why? If you were consulting with the three potential system providers, what advice would you give each one?

Answer: Graph structure may vary, although all should indicate that provider C fails on the order qualifier regarding technical support. Students may defend company A and Company B as being reasonable choices. While A has a higher initial cost, it takes \$25,000 less each year to maintain, a breakeven of 16 years. Company B has a greater installed base of systems, seven to three. Depending on the locations (and possibly identities) of the other installed systems, how funding is secured for the initial investment versus for annual maintenance, one option may be more attractive than another. Company C needs solid advice from a consultant regarding availability of support people; perhaps additional installations can justify increasing the availability of technical support. The amount or effectiveness of user training should also be addressed. Perhaps improved instructional design could reduce the amount of training time needed.



Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: order winner, order qualifier

AACSB: Analytical Thinking

LO: 2.4: Differentiate between order winners and qualifiers and explain why this difference is important to developing the operations and supply chain strategy for a firm.

57) Provide a specific example of an order winner of a company that has evolved into an order qualifier. Then provide a specific example of an order qualifier that has remained an order qualifier for many years and remains one to this day. Which situation do you think is more natural, the eventual conversion from winner to qualifier or the static status of "once an order winner, always an order winner"? Justify your conclusions.

Answer: Answers and examples will vary. Some would argue that there is a gradual conversion of winners to qualifiers thanks to the nature of business competition. Students might also note that the nature of competition and advances in technology make this progression from winner to qualifier a very natural occurrence.

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: order winner, order qualifier

AACSB: Analytical Thinking

LO: 2.4: Differentiate between order winners and qualifiers and explain why this difference is important to developing the operations and supply chain strategy for a firm.

58) What is a trade-off? Offer a definition and provide an example.

Answer: A trade-off is a decision by a firm to emphasize one performance dimension over another, based on the recognition that excellence on some dimensions may conflict with excellence on others. Examples will vary — the authors provide the example of airlines scheduling more flights to increase flexibility at the expense of costs.

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: trade-off

AACSB: Application of Knowledge

LO: 2.5: Discuss the concept of trade-offs and give an example.

59) What creates the necessity for trade-offs?

Answer: Trade-offs are necessitated by virtue of two phenomena. One factor that causes firms to make trade-offs is the recognition that excellence on some dimensions may conflict with excellence on others. The other factor that creates the need is that firm performance can be enhanced by a change in what they are doing.

Diff: 2

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: trade-off

AACSB: Application of Knowledge

LO: 2.5: Discuss the concept of trade-offs and give an example.

60) Describe the four stages of operations and supply chain alignment with business strategy.

Answer: The four stages of alignment are internally neutral, externally neutral, internally supportive, and externally supportive. The internally neutral stage is more of a defensive strategy, where management seeks only to minimize any negative potential in the operations and supply chain areas. There is no effort made to link these areas with the business strategy. In the externally neutral stage, industry practice is followed with no effort made to link the operations and supply chain areas with overall business strategy. There is an assumption made that whatever works for competitors will work for the company. The internally supportive stage features recognition that operations and supply chain structural and infrastructural elements must be aligned with the business strategy. Operations and supply chain areas participate in the strategic debate. In the externally supportive stage the operations and supply areas do more than just support the business strategy – the business strategy actively seeks to exploit the core competencies found within these areas.

Diff: 3

Reference: 2.3 Operations and Supply Chain Strategies

Keywords: internally neutral, externally neutral, internally supportive, externally supportive, alignment

AACSB: Application of Knowledge

LO: 2.7: Explain the importance of strategic alignment and describe the four stages of alignment between the operations and supply chain strategy and the business strategy.