

Introduction to Operations and Supply Chain Management, 3e (Bozarth/Handfield)
Chapter 2 Operations and Supply Chain Strategies

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

Answer: TRUE

Diff: 1 Page Ref: 20

Reference: Elements of the Business

Keywords: structural, infrastructural, element

2) 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 Page Ref: 21

Reference: Elements of the Business

Keywords: strategy, mission statement

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

Answer: FALSE

Diff: 2 Page Ref: 21

Reference: Elements of the Business

Keywords: mission statement

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

Answer: FALSE

Diff: 1 Page Ref: 23

Reference: Elements of the Business

Keywords: strategy, function, functional area

5) In general, core competencies make excellent strategies.

Answer: TRUE

Diff: 2 Page Ref: 23

Reference: Elements of the Business

Keywords: core competency

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

Answer: FALSE

Diff: 2 Page Ref: 23

Reference: Operations and Supply Chain Strategies

Skill: AACSB: Reflective Thinking

Keywords: strategy, operations, supply chain, infrastructural

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

Answer: TRUE

Diff: 1 Page Ref: 26

Reference: Operations and Supply Chain Strategies

Keywords: conformance, quality

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

Answer: TRUE

Diff: 1 Page Ref: 26

Reference: Operations and Supply Chain Strategies

Keywords: delivery, reliability, window

9) Changeover flexibility refers to the ability of a company to change production quickly from one product to another, thereby producing a wide range of products.

Answer: FALSE

Diff: 2 Page Ref: 27

Reference: Operations and Supply Chain Strategies

Keywords: changeover, flexibility, mix

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

Answer: FALSE

Diff: 2 Page Ref: 27

Reference: Operations and Supply Chain Strategies

Keywords: flexibility, mix flexibility

11) 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 Page Ref: 28

Reference: Operations and Supply Chain Strategies

Keywords: trade-off

12) "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 Page Ref: 28

Reference: Operations and Supply Chain Strategies

Keywords: order winner, order qualifier

13) Your employer prepares a request for proposal that describes in vivid detail all of the capabilities that a new computer system should possess. Software vendors with products that meet this request for proposal can be described as order qualifiers.

Answer: TRUE

Diff: 3 Page Ref: 28

Reference: Operations and Supply Chain Strategies

Skill: AACSB: Reflective Thinking

Keywords: order qualifier

14) 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 Page Ref: 29

Reference: Operations and Supply Chain Strategies

Keywords: strategy, alignment, supportive, neutral, stage

15) You decide to open a bookstore with a wide selection, comfortable seating, and 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 Page Ref: 29

Reference: Operations and Supply Chain Strategies

Keywords: strategy, alignment, neutral, stage

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

Answer: TRUE

Diff: 1 Page Ref: 29

Reference: Operations and Supply Chain Strategies

Keywords: strategy, alignment, supportive, neutral, stage

17) 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 Page Ref: 31

Reference: Operations and Supply Chain Strategies

Keywords: closing the loop, loop, strategy, fourth stage

18) Structural elements of a business include:

A) policies.

B) people.

C) decision rules.

D) computer systems.

Answer: D

Diff: 1 Page Ref: 20

Reference: Elements of the Business

Keywords: structural, element

19) _____ is an example of an infrastructural element.

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

Answer: B

Diff: 1 Page Ref: 20

Reference: Elements of the Business

Keywords: infrastructural, element

20) 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 Page Ref: 23

Reference: Strategy

Keywords: business, strategy

21) Which of the following statements about functional strategy is BEST?

- A) Functional strategies are not impacted by the mission statement; instead they are impacted by the overall business strategy.
- 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 Page Ref: 23

Reference: Strategy

Keywords: functional, strategy, cross-functional

22) 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 Page Ref: 23

Reference: Strategy

Keywords: core competency

23) 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 Page Ref: 24

Reference: Operations and Supply Chain Strategies

Keywords: functional, strategy, operations, supply chain

24) 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 Page Ref: 25

Reference: Operations and Supply Chain Strategies

Skill: AACSB: Analytic Skills

Keywords: customer, value, value index

25) 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 Page Ref: 25

Reference: Operations and Supply Chain Strategies

Skill: AACSB: Analytic Skills

Keywords: customer, value, value index

26) 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 Page Ref: 26

Reference: Operations and Supply Chain Strategies

Skill: AACSB: Ethical Reasoning

Keywords: performance, dimension, quality, time, flexibility

27) 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 Page Ref: 26

Reference: Operations and Supply Chain Strategies

Keywords: quality, conformance

28) 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 Page Ref: 26

Reference: Operations and Supply Chain Strategies

Skill: AACSB: Reflective Thinking

Keywords: delivery, reliability, window

29) The ability to produce a wide range of products or service is:

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

Answer: A

Diff: 1 Page Ref: 27

Reference: Operations and Supply Chain Strategies

Keywords: flexibility, mix flexibility

30) 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 has achieved a high level of:

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

Answer: D

Diff: 1 Page Ref: 27

Reference: Operations and Supply Chain Strategies

Keywords: changeover, flexibility, mix

31) 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 Page Ref: 28

Reference: Operations and Supply Chain Strategies

Keywords: qualifier, order qualifier

32) 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 Page Ref: 28

Reference: Operations and Supply Chain Strategies

Keywords: order winner

33) 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 Page Ref: 29

Reference: Operations and Supply Chain Strategies

Keywords: externally neutral, strategy, alignment

34) Before firms can progress to the fourth stage of alignment, they must:

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

Answer: A

Diff: 2 Page Ref: 30

Reference: Operations and Supply Chain Strategies

Keywords: core competency, fourth stage, alignment

35) *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 Page Ref: 31

Reference: Operations and Supply Chain Strategies

Keywords: closing the loop, loop, strategy, fourth stage

36) _____ are tangible resources such as buildings, equipment, and computer systems.

Answer: Structural elements

Diff: 1 Page Ref: 20

Reference: Elements of the Business

Keywords: structural, element

37) _____ are the people, policies, and organizational structure choices made by a firm.

Answer: Infrastructural elements

Diff: 1 Page Ref: 20

Reference: Elements of the Business

Keywords: infrastructural, element

38) The _____ explains why an organization exists.

Answer: mission statement

Diff: 1 Page Ref: 21

Reference: Strategy

Keywords: mission, mission statement

39) 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 Page Ref: 23

Reference: Strategy

Keywords: core competency, competency

40) The translation of an overall business strategy into a level of detail suitable for the marketing area is a(n) _____.

Answer: functional strategy

Diff: 1 Page Ref: 23

Reference: Strategy

Keywords: functional, strategy, operations, supply chain

41) 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 Page Ref: 25

Reference: Operations and Supply Chain Strategies

Keywords: value index, index

42) 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 Page Ref: 26

Reference: Operations and Supply Chain Strategies

Keywords: reliability, dimension, quality

43) The ability to produce a wide range of products or services is referred to as _____.

Answer: mix flexibility

Diff: 2 Page Ref: 27

Reference: Operations and Supply Chain Strategies

Keywords: flexibility, mix flexibility

44) Saba listened in disbelief as the customer service representative droned on, concluding with, "Your cable installer will perform the installation between 8 a.m. and 4 p.m. on the day you have requested." He knew he would have to take the day off to accommodate the service provider's ridiculously wide _____, so he began to think of undetectable diseases he might come down with that day.

Answer: delivery window

Diff: 2 Page Ref: 27

Reference: Operations and Supply Chain Strategies

Keywords: delivery, reliability, window

45) 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) _____.

Answer: trade-off

Diff: 2 Page Ref: 28

Reference: Operations and Supply Chain Strategies

Skill: AACSB: Reflective Thinking

Keywords: trade-off

46) Superior performance on a(n) _____ will not, by itself, give a company a competitive advantage.

Answer: order qualifier

Diff: 3 Page Ref: 28

Reference: Operations and Supply Chain Strategies

Keywords: order qualifier, qualifier

47) 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 Page Ref: 29

Reference: Operations and Supply Chain Strategies

Keywords: alignment, external, externally supportive, supportive

48) 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 Page Ref: 29

Reference: Operations and Supply Chain Strategies

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

49) 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 Page Ref: 20

Reference: Elements of the Business

Keywords: infrastructural, element

50) 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 Page Ref: 21, 23

Reference: Strategy

Keywords: mission statement, business strategy, mission, strategy

51) 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 Page Ref: 24

Reference: Operations and Supply Chain Strategies

Keywords: operations, supply chain, strategy, objectives

52) 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.

$$V = \sum_{i=1}^N I_i \times P_i$$

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

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

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

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 Page Ref: 25

Reference: Operations and Supply Chain Strategies

Skill: AACSB: Analytic Skills

Keywords: customer value, value, index

53) 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 Page Ref: 26-27

Reference: Operations and Supply Chain Strategies

Keywords: operations, supply chain, performance

54) 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 Page Ref: 26

Reference: Operations and Supply Chain Strategies

Keywords: conformance, performance, reliability, quality

55) 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 Page Ref: 27

Reference: Operations and Supply Chain Strategies

Keywords: flexibility, mix flexibility

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.

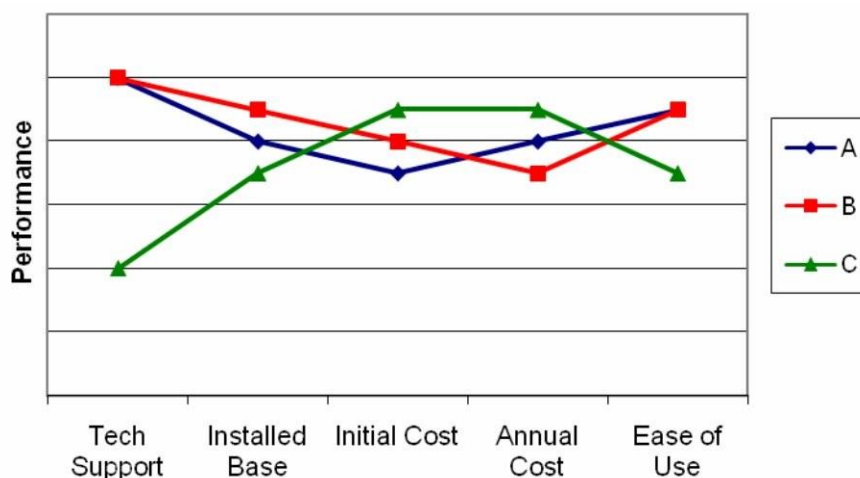
Beyond this, systems will be evaluated according to initial cost, annual maintenance and support costs, and ease of use.

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

Criterion	A	B	C
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 Page Ref: 28

Reference: Operations and Supply Chain Strategies

Skill: AACSB: Analytic Skills

Keywords: order winner, order qualifier

57) 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 Page Ref: 29

Reference: Operations and Supply Chain Strategies

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