

## Chapter 2

Student: \_\_\_\_\_

1. The variety of models and options available to customers is an example of key purchasing criteria that establishes the basis of competition.

True False

2. A characteristic that was once an order winner may become an order qualifier, and vice versa.

True False

3. Order qualifiers are those characteristics of an organization's goods or services that cause them to be perceived as better than the competition.

True False

4. The purchasing criteria of quality and timeliness of delivery are order winners for all companies.

True False

5. It is important that an organization has a clear and simple mission/vision/values statement.

True False

6. A mission statement should provide a guide for the formulation of strategies for the organization.

True False

7. If you think of goals as destinations, then tactics are the roadmaps for reaching the destinations.

True False

8. Strategic planning includes both determining long-term plans and implementing them through allocation of resources and action plans.

True False

9. Organizational strategy must be determined without considering the realities of functional area strengths and weaknesses.

True False

10. Tactics are short-term projects to accomplish a specific objective, assigned to an individual, with a deadline and the resources needed identified.

True False

11. The hierarchy of planning and decision-making is: mission/vision, goals, strategies, tactics, and action plans.

True False

12. Making trade-offs among competitive priorities should be avoided in developing operations strategies.

True False

13. Formulating an operations strategy requires focusing solely on the operations function, leaving the concerns of other functions and the status of external markets to broader organizational strategic planning.

True False

14. In large manufacturing organizations, the operations function tends to adopt a passive role in strategic planning, relying on the functional areas of marketing and finance to establish the strategic direction of the organization.

True False

15. Vertical integration refers to the ownership of a major part or the whole of the supply chain.

True False

16. Matching a competitor on quality or price is usually sufficient to gain market share.

True False

17. Time-based strategies focus on reducing the time required to accomplish certain activities, such as new product development or delivery to the customer.

True False

18. Typically a manufacturing firm would not consider Enterprise Resource Planning (ERP) software as part of the organizations operations strategy.

True False

19. In the 1990's Japanese manufacturing companies tended to shift their strategic orientation away from continuous improvement towards strategies based on low labour costs.

True False

20. Productivity is defined as the ratio of output to input.

True False

21. Labour costs are included as one of the inputs in all productivity measures.

True False

22. Labour productivity is one example of a multifactor productivity measurement.

True False

23. Tracking productivity measures over time enables managers to judge organizational performance and to decide where improvements are needed.

True False

24. Productivity is directly related to competitiveness.

True False

25. Even though labour cost as a proportion of total cost has been decreasing in manufacturing companies, labour productivity is still the main measure being used to gauge the performance of individuals and plants.

True False

26. Labour productivity is an example of a total productivity measure.

True False

27. Service productivity is easier to measure than manufacturing productivity because it is more labour intensive.

True False

28. Workers are the main determinant of productivity.

True False

29. Computer automation will always result in increased productivity.

True False

30. Variability of the output of services makes it more difficult to measure service productivity.

True False

31. Product variety is an example of:

A. a generic operations strategy.

B. operations infrastructure.

C. a process type.

D. a dimension of flexibility.

E. a key purchasing criteria.

32. Which of the following is not one of the competitive priorities organizations emphasize as the basis of competing with one-another?

- A. Cost
- B. Quality
- C. Product duplication
- D. Flexibility
- E. Delivery reliability

33. Which of the following is not a key purchasing criterion?

- A. Price
- B. Variety
- C. Quality
- D. Customer service
- E. Vendor relations

34. Characteristics that customers perceive as minimum standards of acceptability are called:

- A. order winners.
- B. order qualifiers.
- C. core competencies.
- D. distinctive competencies.
- E. minimum attributes.

35. Strategies have a(n) \_\_\_\_\_ impact on the general direction and basic character of a company.

- A. long-term.
- B. medium-term.
- C. short-term.
- D. insignificant.
- E. tactical.

36. The shared beliefs of an organizations stakeholders are its:

- A. policies.
- B. vision.
- C. strategy.
- D. mission.
- E. values.

37. Of the following, which aspect of strategic planning involves medium or short-term projects to accomplish specific objectives?

- A. Goals and objectives
- B. Functional strategies
- C. Action plans
- D. Forecasts
- E. Mission/vision statements

38. Which of the following are major decision-making categories for operations policies and action plans?

- I. Facility
- II. Capacity
- III. Process types and technology
- IV. Human Resources

- A. I and II only
- B. I, II, and III only
- C. III and IV only
- D. II, III, and IV only
- E. I, II, III, and IV

39. Which of the following are steps for formulating an operations strategy?

- I. Link the organizational goals to the operations strategy.
- II. Define the mission and values of the organization.
- III. Conduct an audit to determine the strengths/weaknesses of the current operations strategy.
- IV. Assess the degree of focus at each plant.

- A. I and II only
- B. I, II, and III only
- C. I, III, and IV only
- D. II, III, and IV only
- E. I, II, III, and IV



40. The generic operations strategy that emphasizes capital-intensive methods to achieve higher labour productivity and lower unit costs is referred to as \_\_\_\_\_.
- A. low labour cost strategy
  - B. scale-based strategy
  - C. focused factories strategy
  - D. outsourcing
  - E. flexible factories strategy
41. Radical process redesign based on process re-orientation, breaking down functional silos and integrating operations into customer-focused processes are tactics associated with what generic operations strategy?
- A. Low labour cost strategy
  - B. Scale-based strategy
  - C. Focused factories strategy
  - D. Business process reengineering
  - E. Flexible factories strategy
42. Time-Based strategies do not focus on:
- A. the time to deliver a product.
  - B. maintaining quality.
  - C. planning time.
  - D. production design time.
  - E. changeover time.

43. Productivity is expressed as:

- A. output plus input.
- B. output minus input.
- C. output times input.
- D. output divided by input.
- E. input divided by output.

44. A measure of productivity which reflects a combination of some or all of the resources used to obtain a certain output is:

- A. labour productivity.
- B. machine productivity.
- C. multifactor productivity.
- D. materials productivity.
- E. overhead productivity.

45. Canvalves Company produces cast bronze valves on an assembly line. It currently produces 800 valves each 8-hour shift. If the production is increased to 1,200 valves each shift, the productivity increases by:

- A. 50%
- B. 33%
- C. 25%
- D. 67%
- E. none of the choices are correct.

46. In an assembly operation at a furniture factory, six employees assembled an average of 450 standard dining chairs per 5-day week. What is the labour productivity of this operation?

- A. 90 chairs/worker/day
- B. 20 chairs/worker/day
- C. 15 chairs/worker/day
- D. 75 chairs/worker/day
- E. None of the choices are correct.

47. The weekly output of a fabrication process is shown below together with data for labour and material inputs. Standard selling price is \$125 per unit. Overhead is charged weekly at the rate of \$1,500 plus .5 times direct labour cost. Assume a 40-hour week and an hourly wage of \$16. Material cost is \$10 per linear foot. What is the average multifactor productivity?

<u>Week</u>	<u>Output</u>	<u># Workers</u>	<u>Material (feet)</u>
1	392	5	2720
2	408	6	2790

- A. 1.463
- B. 1.456
- C. 1.431
- D. 1.422
- E. None of the choices are correct.

48. Which of the following are not true of productivity measures?

- A. Labour productivity is mainly used for manufacturing and not used for services.
- B. Productivity measures can track performance over time.
- C. Labour productivity is used in labour wage negotiations.
- D. Productivity measures can be used to measure the performance of an organization or an entire country.
- E. All of the choices are true.

49. Which of the following is not a factor that affects productivity?

- A. Use of computers in an office.
- B. Design of the workspace.
- C. Use of Internet and e-mail.
- D. Standardizing work process.
- E. Analysis of competitors.

50. Which of these factors affects productivity?

- A. Methods and management
- B. Capital equipment
- C. Technology
- D. Labour
- E. All of the choices are true.

51. Which of the following is not a general factor that affects productivity?

- A. Methods and management
- B. Equipment and technology
- C. Competitors
- D. Labour

52. A company has introduced a process improvement that reduces processing time for each unit, so that output is increased by 25% with less material, but one additional worker required. Under the old process, five workers could produce 60 units per hour. Labour costs are \$12/hour, and material input was previously \$16/unit. For the new process, material is now \$10/unit. Overhead is charged at 1.6 times direct labour cost. Finished units sell for \$31 each. What increase in productivity is associated with the process improvement?

53. The manager of a carpet store is trying to determine optimal installation crew size. He has tried various crew sizes with the results shown below. Compute the average labour productivity for each crew size. Which crew size do you recommend?

<u>Crew Size</u>	<u>Yards Installed</u>
2	706
4	1308
3	1017
3	1002
4	1288
2	692

54. The weekly output of a production process is shown below, together with data for labour and material inputs. The standard inventory value of the output is \$125 per unit. Overhead is charged weekly at the rate of \$1500 plus .5 times direct labour cost. Assume a 40-hour week and an hourly wage of \$16. Material cost is \$10 per running foot. Compute the average multifactor productivity for this process.

<u>Week</u>	<u>Output</u>	<u># Workers</u>	<u>Material (ft.)</u>
1	412	6	2840
2	364	5	2550
3	392	5	2720
4	408	6	2790

## Chapter 2 Key

1. The variety of models and options available to customers is an example of key purchasing criteria that establishes the basis of competition.

TRUE

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-01 List and briefly discuss the primary ways that organizations compete.*

*Stevenson - Chapter 02 #1*

*Topic: 02-01 Competitiveness*

2. A characteristic that was once an order winner may become an order qualifier, and vice versa.

TRUE

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-01 List and briefly discuss the primary ways that organizations compete.*

*Stevenson - Chapter 02 #2*

*Topic: 02-01 Competitiveness*

3. Order qualifiers are those characteristics of an organization's goods or services that cause them to be perceived as better than the competition.

FALSE

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-01 List and briefly discuss the primary ways that organizations compete.*

*Stevenson - Chapter 02 #3*

*Topic: 02-01 Competitiveness*



4. The purchasing criteria of quality and timeliness of delivery are order winners for all companies.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Hard*

*Learning Objective: 02-01 List and briefly discuss the primary ways that organizations compete.*

*Stevenson - Chapter 02 #4*

*Topic: 02-01 Competitiveness*

5. It is important that an organization has a clear and simple mission/vision/values statement.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #5*

*Topic: 02-03 Mission, Vision, and Values*

6. A mission statement should provide a guide for the formulation of strategies for the organization.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #6*

*Topic: 02-03 Mission, Vision, and Values*

7. If you think of goals as destinations, then tactics are the roadmaps for reaching the destinations.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Hard*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #7*

*Topic: 02-02 Strategic Planning*

8. Strategic planning includes both determining long-term plans and implementing them through allocation of resources and action plans.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #8*

*Topic: 02-02 Strategic Planning*

9. Organizational strategy must be determined without considering the realities of functional area strengths and weaknesses.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #9*

*Topic: 02-02 Strategic Planning*

10. Tactics are short-term projects to accomplish a specific objective, assigned to an individual, with a deadline and the resources needed identified.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #10*

*Topic: 02-02 Strategic Planning*

11. The hierarchy of planning and decision-making is: mission/vision, goals, strategies, tactics, and action plans.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #11*

*Topic: 02-02 Strategic Planning*

12. Making trade-offs among competitive priorities should be avoided in developing operations strategies.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #12*

*Topic: 02-04 Operations Strategy*

13. Formulating an operations strategy requires focusing solely on the operations function, leaving the concerns of other functions and the status of external markets to broader organizational strategic planning.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #13*

*Topic: 02-04 Operations Strategy*

14. In large manufacturing organizations, the operations function tends to adopt a passive role in strategic planning, relying on the functional areas of marketing and finance to establish the strategic direction of the organization.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #14*

*Topic: 02-04 Operations Strategy*

15. Vertical integration refers to the ownership of a major part or the whole of the supply chain.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #15*

*Topic: 02-02 Strategic Planning*

16. Matching a competitor on quality or price is usually sufficient to gain market share.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-01 List and briefly discuss the primary ways that organizations compete.*

*Stevenson - Chapter 02 #16*

*Topic: 02-01 Competitiveness*

17. Time-based strategies focus on reducing the time required to accomplish certain activities, such as new product development or delivery to the customer.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #17*

*Topic: 02-04 Operations Strategy*

18. Typically a manufacturing firm would not consider Enterprise Resource Planning (ERP) software as part of the organization's operations strategy.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #18*

*Topic: 02-04 Operations Strategy*

19. In the 1990's Japanese manufacturing companies tended to shift their strategic orientation away from continuous improvement towards strategies based on low labour costs.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a companys strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #19*

*Topic: 02-04 Operations Strategy*

20. Productivity is defined as the ratio of output to input.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #20*

*Topic: 02-05 Productivity*

21. Labour costs are included as one of the inputs in all productivity measures.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #21*

*Topic: 02-05 Productivity*

22. Labour productivity is one example of a multifactor productivity measurement.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #22*

*Topic: 02-06 Measuring Productivity*

23. Tracking productivity measures over time enables managers to judge organizational performance and to decide where improvements are needed.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #23*

*Topic: 02-06 Measuring Productivity*

24. Productivity is directly related to competitiveness.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #24*

*Topic: 02-06 Measuring Productivity*

25. Even though labour cost as a proportion of total cost has been decreasing in manufacturing companies, labour productivity is still the main measure being used to gauge the performance of individuals and plants.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #25*

*Topic: 02-06 Measuring Productivity*

26. Labour productivity is an example of a total productivity measure.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #26*

*Topic: 02-06 Measuring Productivity*

27. Service productivity is easier to measure than manufacturing productivity because it is more labour intensive.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #27*

*Topic: 02-07 Productivity Measurement of Services*

28. Workers are the main determinant of productivity.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #28*

*Topic: 02-08 Factors that Affect Productivity*

29. Computer automation will always result in increased productivity.

**FALSE**

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*



*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #29*

*Topic: 02-08 Factors that Affect Productivity*

30. Variability of the output of services makes it more difficult to measure service productivity.

**TRUE**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #30*

*Topic: 02-07 Productivity Measurement of Services*

31. Product variety is an example of:

A. a generic operations strategy.

B. operations infrastructure.

C. a process type.

D. a dimension of flexibility.

**E.** a key purchasing criteria.

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-01 List and briefly discuss the primary ways that organizations compete.*

*Stevenson - Chapter 02 #31*

*Topic: 02-01 Competitiveness*

32. Which of the following is not one of the competitive priorities organizations emphasize as the basis of competing with one-another?
- A. Cost
  - B. Quality
  - C. Product duplication**
  - D. Flexibility
  - E. Delivery reliability

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-01 List and briefly discuss the primary ways that organizations compete.*

*Stevenson - Chapter 02 #32*

*Topic: 02-01 Competitiveness*

33. Which of the following is not a key purchasing criterion?
- A. Price
  - B. Variety
  - C. Quality
  - D. Customer service
  - E. Vendor relations**

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-01 List and briefly discuss the primary ways that organizations compete.*

*Stevenson - Chapter 02 #33*

*Topic: 02-01 Competitiveness*

34. Characteristics that customers perceive as minimum standards of acceptability are called:
- A. order winners.
  - B. order qualifiers.**
  - C. core competencies.
  - D. distinctive competencies.
  - E. minimum attributes.

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-01 List and briefly discuss the primary ways that organizations compete.*

*Stevenson - Chapter 02 #34*

*Topic: 02-01 Competitiveness*

35. Strategies have a(n) \_\_\_\_\_ impact on the general direction and basic character of a company.
- A. long-term.**
  - B. medium-term.
  - C. short-term.
  - D. insignificant.
  - E. tactical.

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #35*

*Topic: 02-02 Strategic Planning*

36. The shared beliefs of an organizations stakeholders are its:

- A. policies.
- B. vision.
- C. strategy.
- D. mission.
- E. values.

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-02 Describe a companys strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #36*

*Topic: 02-03 Mission, Vision, and Values*

37. Of the following, which aspect of strategic planning involves medium or short-term projects to accomplish specific objectives?

- A. Goals and objectives
- B. Functional strategies
- C. Action plans
- D. Forecasts
- E. Mission/vision statements

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a companys strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involvea in formulating an operations strategy.*

*Stevenson - Chapter 02 #37*

*Topic: 02-04 Operations Strategy*

38. Which of the following are major decision-making categories for operations policies and action plans?
- I. Facility
  - II. Capacity
  - III. Process types and technology
  - IV. Human Resources
- 
- A. I and II only
  - B. I, II, and III only
  - C. III and IV only
  - D. II, III, and IV only
  - E. I, II, III, and IV

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #38*

*Topic: 02-04 Operations Strategy*

39. Which of the following are steps for formulating an operations strategy?

- I. Link the organizational goals to the operations strategy.
- II. Define the mission and values of the organization.
- III. Conduct an audit to determine the strengths/weaknesses of the current operations strategy.
- IV. Assess the degree of focus at each plant.

- A. I and II only
- B. I, II, and III only
- C. I, III, and IV only**
- D. II, III, and IV only
- E. I, II, III, and IV

*Accessibility: Keyboard Navigation*

*Difficulty: Hard*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #39*

*Topic: 02-04 Operations Strategy*

40. The generic operations strategy that emphasizes capital-intensive methods to achieve higher labour productivity and lower unit costs is referred to as \_\_\_\_\_.

- A. low labour cost strategy
- B. scale-based strategy**
- C. focused factories strategy
- D. outsourcing
- E. flexible factories strategy

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

41. Radical process redesign based on process re-orientation, breaking down functional silos and integrating operations into customer-focused processes are tactics associated with what generic operations strategy?

- A. Low labour cost strategy
- B. Scale-based strategy
- C. Focused factories strategy
- D. Business process reengineering**
- E. Flexible factories strategy

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #41*

*Topic: 02-04 Operations Strategy*

42. Time-Based strategies do not focus on:

- A. the time to deliver a product.
- B. maintaining quality.**
- C. planning time.
- D. production design time.
- E. changeover time.

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-02 Describe a company's strategic planning; mission/vision/values; strategies; and operations strategy; and list the steps involved in formulating an operations strategy.*

*Stevenson - Chapter 02 #42*

*Topic: 02-04 Operations Strategy*

43. Productivity is expressed as:

- A. output plus input.
- B. output minus input.
- C. output times input.
- D. output divided by input.
- E. input divided by output.

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #43*

*Topic: 02-05 Productivity*

44. A measure of productivity which reflects a combination of some or all of the resources used to obtain a certain output is:

- A. labour productivity.
- B. machine productivity.
- C. multifactor productivity.
- D. materials productivity.
- E. overhead productivity.

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #44*

*Topic: 02-06 Measuring Productivity*



45. Canvalves Company produces cast bronze valves on an assembly line. It currently produces 800 valves each 8-hour shift. If the production is increased to 1,200 valves each shift, the productivity increases by:

- A. 50%
- B. 33%
- C. 25%
- D. 67%
- E. none of the choices are correct.

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #45*

*Topic: 02-06 Measuring Productivity*

46. In an assembly operation at a furniture factory, six employees assembled an average of 450 standard dining chairs per 5-day week. What is the labour productivity of this operation?

- A. 90 chairs/worker/day
- B. 20 chairs/worker/day
- C. 15 chairs/worker/day
- D. 75 chairs/worker/day
- E. None of the choices are correct.

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #46*

*Topic: 02-06 Measuring Productivity*

47. The weekly output of a fabrication process is shown below together with data for labour and material inputs. Standard selling price is \$125 per unit. Overhead is charged weekly at the rate of \$1,500 plus .5 times direct labour cost. Assume a 40-hour week and an hourly wage of \$16. Material cost is \$10 per linear foot. What is the average multifactor productivity?

<u>Week</u>	<u>Output</u>	<u># Workers</u>	<u>Material (feet)</u>
1	392	5	2720
2	408	6	2790

- A. 1.463
- B. 1.456**
- C. 1.431
- D. 1.422
- E. None of the choices are correct.

*Difficulty: Hard*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #47*

*Topic: 02-06 Measuring Productivity*

48. Which of the following are not true of productivity measures?

- A. Labour productivity is mainly used for manufacturing and not used for services.**
- B. Productivity measures can track performance over time.
- C. Labour productivity is used in labour wage negotiations.
- D. Productivity measures can be used to measure the performance of an organization or an entire country.
- E. All of the choices are true.

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #48*

49. Which of the following is not a factor that affects productivity?

- A. Use of computers in an office.
- B. Design of the workspace.
- C. Use of Internet and e-mail.
- D. Standardizing work process.
- E. Analysis of competitors.

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #49*

*Topic: 02-08 Factors that Affect Productivity*

50. Which of these factors affects productivity?

- A. Methods and management
- B. Capital equipment
- C. Technology
- D. Labour
- E. All of the choices are true.

*Accessibility: Keyboard Navigation*

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #50*

*Topic: 02-08 Factors that Affect Productivity*

51. Which of the following is not a general factor that affects productivity?

- A. Methods and management
- B. Equipment and technology
- C. Competitors
- D. Labour

*Accessibility: Keyboard Navigation*

*Difficulty: Medium*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #51*

*Topic: 02-08 Factors that Affect Productivity*

52. A company has introduced a process improvement that reduces processing time for each unit, so that output is increased by 25% with less material, but one additional worker required. Under the old process, five workers could produce 60 units per hour. Labour costs are \$12/hour, and material input was previously \$16/unit. For the new process, material is now \$10/unit. Overhead is charged at 1.6 times direct labour cost. Finished units sell for \$31 each. What increase in productivity is associated with the process improvement?

$$\text{Before : } \frac{60(31)}{5(12) + 60(16) + 1.6(5)(12)} = \frac{1,860/\text{hr}}{1,116/\text{hr}} = 1.667$$

$$\text{After : } \frac{60(1.25)(31)}{6(12) + 75(10) + 1.6(6)(12)} = \frac{2,325/\text{hr}}{937.2/\text{hr}} = 2.481$$

$$\text{Productivity increase} = \frac{(2.481 - 1.667) \times 100}{1.667} = 48.83\%$$

*Difficulty: Hard*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #52*

*Topic: 02-06 Measuring Productivity*

53. The manager of a carpet store is trying to determine optimal installation crew size. He has tried various crew sizes with the results shown below. Compute the average labour productivity for each crew size. Which crew size do you recommend?

<u>Crew Size</u>	<u>Yards Installed</u>
2	706
4	1308
3	1017
3	1002
4	1288
2	692

<u>Crew Size</u>	<u>Yards Installed</u>	<u>Labour Productivity</u>
2	706	353 yards/worker
4	1,308	327 yards/worker
3	1,017	339 yards/worker
3	1,002	334 yards/worker
4	1,288	322 yards/worker
2	692	346 yards/worker
<u>Crew Size</u>	<u>Avg. Labour Productivity</u>	
2	$(353 + 346)/2 = 349.5$ yards/worker	
3	$(339 + 334)/2 = 336.5$ yards/worker	
4	$(327 + 322)/2 = 324.5$ yards/worker	

Recommend optimal crew size = 2

*Difficulty: Easy*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #53*

*Topic: 02-06 Measuring Productivity*

54. The weekly output of a production process is shown below, together with data for labour and material inputs. The standard inventory value of the output is \$125 per unit. Overhead is charged weekly at the rate of \$1500 plus .5 times direct labour cost. Assume a 40-hour week and an hourly wage of \$16. Material cost is \$10 per running foot. Compute the average multifactor productivity for this process.

Week	Output	# Workers	Material (ft.)
1	412	6	2840
2	364	5	2550
3	392	5	2720
4	408	6	2790

$$\text{Wk 1: } \frac{412(125)}{6(40)(16) + 2,840(10) + .5(6)(40)(16) + 1,500} = \frac{51,500}{35,660} = 1.444$$

$$\text{Wk 2: } \frac{365(125)}{5(40)(16) + 2,550(10) + .5(5)(40)(16) + 1,500} = \frac{45,500}{31,800} = 1.431$$

$$\text{Wk 3: } \frac{392(125)}{5(40)(16) + 2,720(10) + .5(5)(40)(16) + 1,500} = \frac{49,000}{33,500} = 1.463$$

$$\text{Wk 4: } \frac{408(125)}{6(40)(16) + 2,790(10) + .5(6)(40)(16) + 1,500} = \frac{51,000}{35,160} = 1.451$$

$$\text{Avg.} = (1.444 + 1.431 + 1.463 + 1.451)/4 = 5.789/4 = 1.447$$

*Difficulty: Medium*

*Learning Objective: 02-03 Define and measure the term productivity; describe factors affecting productivity; and explain why measuring the productivity of services is difficult.*

*Stevenson - Chapter 02 #54*

*Topic: 02-06 Measuring Productivity*

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