

Chapter 15

Student: _____

1. While Timberland was rapidly growing, it did not build _____, which ended up causing many problems for the company.
 - A. long-term relationships with its new international retailers
 - B. a tightly managed and coordinated global manufacturing and logistics system
 - C. short-term relationships with its suppliers
 - D. an international tracking system
 - E. advanced manufacturing facilities
2. What is the process of creating a product called?
 - A. bureaucracy
 - B. materials management
 - C. production
 - D. administration
 - E. R&D
3. _____ is the activity that controls the transportation of physical materials through the value chain, from procurement through production and into distribution.
 - A. operations
 - B. production
 - C. materials management
 - D. bureaucracy
 - E. logistics
4. Which of these in relation to materials management refers to the procurement and physical transmission of material through the supply chain, from suppliers to consumers?
 - A. interchange
 - B. logistics
 - C. reciprocation
 - D. conveyance
 - E. operations
5. Two important objectives shared by both manufacturing and materials management are to simultaneously:
 - A. increase quality and increase revenues
 - B. increase product awareness and lower costs
 - C. lower costs and increase quality
 - D. increase revenues and decrease customer complaints
 - E. increase quality and reduce inventories
6. Which of the following is not a result of improved quality control?
 - A. Greater product quality means lower warranty costs
 - B. Increased product quality means lower scrap costs
 - C. Increased quality leads to lower unit costs
 - D. Productivity increases because time is not wasted manufacturing poor-quality products that cannot be sold
 - E. Increased product quality means higher rework

7. The main management technique that companies are utilizing to boost their product quality is:
- A. total quality management.
 - B. materials management.
 - C. reengineering.
 - D. logistics.
 - E. Deming quality management system
8. Saving time by not producing poor quality products that cannot be sold, lowering rework costs, lowering scrap costs, and lowering warranty costs are the intended results of:
- A. total feature management.
 - B. reengineering.
 - C. logistics.
 - D. total quality management.
 - E. materials management
9. The TQM concept was developed by a number of American consultants such as:
- A. Martin Wolf, R.B. Weber, and Raymond Vernon.
 - B. W. Edwards Deming, Joseph Juran, and A.V. Feigenbaum.
 - C. J.H. Dunning, M. McQueen, and Michael Porter.
 - D. Paul Krugman, Raymond Vernon, and Michael Porter.
 - E. David Ricardo, Raymond Vernon, and Michael Porter
10. _____ argued that management should embrace the philosophy that mistakes, defects, and poor-quality materials are not acceptable and should be eliminated.
- A. Deming
 - B. Juran
 - C. Vernon
 - D. Krugman
 - E. Porter
11. Which of the following is not a suggestion from Deming?
- A. Management should create an environment in which employees will not fear reporting problems or recommending improvements
 - B. Work standards should be defined as number or quotas
 - C. Quality of supervision should be improved by allowing more time for supervisors to work with employees and by providing them with the tools they need to do the job
 - D. Achieving better quality requires the commitment of everyone in the company
 - E. Work standards should be defined to include some standard of quality
12. Before the firm is allowed access to the European marketplace, the European Union requires that the quality of a firm's manufacturing processes and products be certified under a quality standard known as _____
- A. total quality management
 - B. reengineering
 - C. BT 12000
 - D. ISO 9000
 - E. QM 15000
13. The key decision factors that pertain to where an international firm locates its manufacturing facilities can be grouped under three broad headings. These are:
- A. political factors, economic factors, and legal factors.
 - B. country factors, technological factors, and product factors.
 - C. product factors, service factors, and labour factors.
 - D. language factors, cultural factors, and transportation factors.
 - E. market factors, production factors, and logistics factors

14. Demands for local responsiveness creates pressures to _____ the major national or regional markets in which the firm does business or to implement flexible manufacturing processes that enable the firm to customize the product coming out of a factory according to the market in which it is to be sold.
- A. receive supplies from
 - B. market to
 - C. centralize logistic processes to
 - D. decentralize manufacturing activities to
 - E. increase customization for
15. A firm should locate its various manufacturing activities where the economic, political, and cultural conditions are _____ to the performance of those activities.
- A. beneficial
 - B. challenging
 - C. indifferent
 - D. government-protected
 - E. extraneous
16. _____ include(s) the presence of an appropriately skilled labour pool and supporting industries that can play an important role in deciding where to locate manufacturing activities.
- A. Internalities
 - B. Externalities
 - C. Management
 - D. Administration
 - E. Factors of production
17. (1) The level of its fixed costs, (2) its minimum efficient scale, and (3) _____ are three characteristics of a manufacturing technology that are particularly interesting to international firms when making manufacturing location decisions.
- A. its flexibility
 - B. its variable costs
 - C. the technological sophistication of the manufacturing process
 - D. the cost of moving manufacturing executives overseas
 - E. its factors of production
18. In some cases the _____ costs of setting up a manufacturing plant are so high that a firm must serve the world market from a single location or from a very few locations.
- A. changeable
 - B. reoccurring
 - C. fixed
 - D. variable
 - E. destination
19. The concept of economies of scale tells us that as plant output expands unit costs do what?
- A. Increase
 - B. Decrease
 - C. Remain the same
 - D. Expand exponentially
 - E. Decrease exponentially
20. The _____ declines with output until a certain output level is reached; at which point further increases in output realize little reduction in unit costs.
- A. component expense curve
 - B. unit expense line
 - C. unit cost curve
 - D. component cost slope
 - E. marginal cost curve

21. The larger the minimum efficient scale of a plant, the greater the argument for centralizing production in a single location or a limited number of locations is the implication of the _____ concept.
- A. consumer input
 - B. economies of scale
 - C. production
 - D. materials management
 - E. TQM
22. What are manufacturing technologies that are designed to reduce setup times, increase use of individual machines through better scheduling, and improve quality control at all stages of manufacturing called?
- A. multifaceted production
 - B. lean production
 - C. lateral production
 - D. temporal production
 - E. six sigma
23. According to the textbook, _____ manufacturing technologies provide a company the ability to produce a wider variety of end products at a unit cost that at one time could be achieved only through the mass production of a standardized output.
- A. multifaceted
 - B. lateral
 - C. side by side
 - D. flexible
 - E. mass customization
24. Which of the following is not one of the objectives of flexible manufacturing technology, or lean production?
- A. Reduce setup times for complex equipment
 - B. Bring a factory into compliance with ISO 9000
 - C. Improve quality control at all stages of the manufacturing process
 - D. Increase utilization of individual machines through scheduling
 - E. None of these answers is correct
25. What refers to the ability to produce a wider variety of end products at a unit cost that at one time could be achieved only through the mass production of a standardized output?
- A. Assembly-line like customization
 - B. Standardized customization
 - C. Mass customization
 - D. Economies of customization
 - E. Product customization
26. _____ customization implies that a firm may be able to customize its product range to suit the needs of different customer groups without bearing a cost penalty.
- A. Assembly-like
 - B. Standardized
 - C. Economic
 - D. Mass
 - E. Manufacturing

27. One of Toyota's engineers, Ohno Taiichi, found many problems with the company's mass production system. Which of the following is not one of these problems?
- A. The system was unable to accommodate consumer preferences for product diversity
 - B. Long production runs created massive inventories that had to be stored in large warehouses which was expensive
 - C. The system ran too quickly for the employees to keep up which created a high turnover due to frustration and low evaluations
 - D. If the initial machine settings were wrong, long production runs resulted in the production of a large number of defects
 - E. Small production runs were uneconomical
28. What is a grouping of various types of machinery, a common materials handler, and a centralized cell controller?
- A. Malleable manufacturing unit
 - B. Elastic manufacturing station
 - C. Rigid machine unit
 - D. Flexible machine cell
 - E. Adaptive manufacturing module
29. All of the following are advantages of flexible manufacturing except:
- A. improved efficiency.
 - B. flexible manufacturing technologies allow companies to customize products to suite the unique demands of small consumer groups.
 - C. increase customer responsiveness.
 - D. flexible manufacturing technologies help firms standardize products for different national markets.
 - E. small production runs are economical
30. In terms of making a location decision, when fixed costs are substantial, the minimum efficient scale of production is high, and flexible manufacturing technologies are available, it makes sense to:
- A. manufacture the product in every country in which it is sold.
 - B. concentrate production at a few choice locations.
 - C. spread production over as many locations as possible.
 - D. outsource production to a third party.
 - E. disperse distribution centres and maintain higher minimum inventories
31. Many electronic components and pharmaceuticals have _____ value-to-weight ratios, whereas refined sugar, paint, and petroleum products have _____ value-to-weight ratios.
- A. high; low
 - B. low; high
 - C. low; no
 - D. no; high
 - E. insignificant; significant
32. Two product factors impact location decisions. These are:
- A. the product's value-to-weight ratio and whether the product serves universal needs.
 - B. the product's shape and the product's weight.
 - C. the product's content and the product's point-of-origin.
 - D. the product's technological sophistication and the product's shape.
 - E. product's packaging and durability
33. Two product factors impact location decisions. These are (1) whether the product serves universal needs and (2)
- A. the product's shape.
 - B. the product's point-of-origin.
 - C. the product's weight.
 - D. the product's value-to-weight ratio.
 - E. the product's volume

34. Needs that are the same all over the world are referred to as _____ needs.
- specific
 - domestic
 - universal
 - individualistic
 - global
35. The following two factors that correctly depict the manufacturing attributes of a product that has universal needs are
- Asince there are few national differences in consumer taste and preferences for such products, the need . for local responsiveness is reduced, manufacturing should be concentrated at an optimal location.
- Bsince there are many national differences in consumer taste and preferences for such products, the need . for local responsiveness is reduced, manufacturing should be concentrated at an optimal location.
- Csince there are few national differences in consumer taste and preferences for such products, the need . for local responsiveness is increased, manufacturing should take place in each major market in which the firm is active.
- Dsince there are many national differences in consumer taste and preferences for such products, the need . for local responsiveness is increased, manufacturing should take place in each major market in which the firm is active.
- Esince there are some national differences in consumer behaviour, but not in needs and perceived . benefits, there is only moderate demand for local responsiveness and manufacturing needs only to be moderately dispersed.
36. There are two basic strategies for locating manufacturing facilities. These are:
- Aconcentrating them in the optimal location and serve the world market from there and, concentrate them . in markets that are parts of major trade blocks.
- Blocate at least one manufacturing facility in each continent in which the firm is active and, concentrate . manufacturing at an optimal location.
- C. decentralize them in major trading blocks, but not in smaller markets
- D. concentrate them in markets that are part of major trade blocks and, centralizing them at a single location.
- Econcentrate them in the optimal location and serve the world market from there and, decentralizing . them in various regional or national locations that are close to major markets.
37. Concentration of manufacturing makes sense when:
- trade barriers are high.
 - the product's value-to-weight ratio is high.
 - the product's value-to-weight ratio is low.
 - the product does not serve universal needs.
 - the product's value-to-volume ratio is high
38. Placing manufacturing facilities in one concentrated location makes sense for all of the following reasons except:
- trade barriers are high.
 - the product serves universal needs.
 - important exchange rates are expected to remain relatively stable.
 - the production technology has high fixed costs or a high minimum efficient scale or a flexible manufacturing technology exists.
 - product's value-to-weight ratio is high
39. Decentralization of the location of a firm's manufacturing locations makes sense for all of the following reasons except:
- trade barriers are low.
 - volatility in important exchange rates is expected.
 - the production technology has low fixed costs, low minimum efficient scale or a flexible manufacturing technology exists.
 - the product does not serve universal needs.
 - the product's value-to-weight ratio is low

40. When is decentralization of manufacturing appropriate?
- A. the product serves universal needs
 - B. important exchange rates are expected to remain relatively stable
 - C. the product's value-to-weight ratio is high
 - D. trade barriers are high
 - E. high minimum efficient scale
41. Initially, many foreign factories are established where:
- A. labour costs are high.
 - B. labour costs are low.
 - C. labour costs are on par with the manufacturer's typical costs.
 - D. labour intensive manufacturing is the exception rather than the norm.
 - E. labour is more productive
42. The strategic role of foreign factories is typically to:
- A. produce labour-intensive products at as low a cost as possible.
 - B. appease foreign governments by producing jobs in their countries.
 - C. increase product quality.
 - D. provide domestically managers foreign experience.
 - E. increase market penetration by reducing source effects
43. The two sources of improvement in the capabilities of a foreign factory are:
- A the increasing abundance of advanced factors of production in the nation in which the factory is located and pressure from the centre to improve a factory's cost structure and/or customize a product to the demands of consumers in a particular nation can start a chain of events that ultimately leads to development of additional capabilities at that factory.
 - B the increasing abundance of advanced factors of production in the nation in which the factory is located and the large amount of skilled workers in the area of which the factory is located.
 - C pressure from the centre to improve a factory's cost structure and/or customize a product to the demands of consumers in a particular nation can start a chain of events that ultimately leads to development of additional capabilities at that factory and increasing government regulations that benefit the factory.
 - D the large amount of skilled workers in the area of which the factory is located and increasing government regulations that benefit the factory.
 - E productivity improvements leads to excess manufacturing capacity that can be used elsewhere and increasing expertise of workers due to learning effects
44. A major aspect of a transnational strategy is a belief in _____--the idea that valuable knowledge does not reside just in a firm's domestic operations.
- A. information sharing
 - B. knowledge effects
 - C. global learning
 - D. transnational sharing
 - E. intellectual equality
45. What are the type of decisions about whether a firm should make or buy the component parts that go into the final product?
- A. end-user
 - B. synergistic
 - C. sourcing
 - D. quality
 - E. cost

46. The arguments that support making component parts in-house (i.e. vertical integration) are fourfold:
 A lower costs, facilitates investments in highly specialized assets, protects proprietary product technology . and, facilitates the scheduling of adjacent processes.
 B greater flexibility, helps a firm capture orders from international customers, facilitates investments in . highly standardized assets and, facilitates the scheduling of adjacent processes.
 C helps a firm capture orders from international customers, lower costs, facilitates investments in highly . standardized assets and, facilitates the scheduling of adjacent processes.
 D lower costs, greater flexibility, facilitates the scheduling of adjacent customers and, facilitates . investments in highly specialized assets.
 E. greater efficiencies, better quality control, protects against technology theft, and more responsive to customers
47. In general, when substantial investments in specialized assets are required to manufacture a component, a firm will:
 A. re-engineer the component to reduce costs
 B. find a alternative method of manufacturing the component.
 C. contract out the production of the component rather than make it internally.
 D. discontinue making the product that the component goes into.
 E. prefer to make the component internally rather than contract it out to a supplier.
48. Technology that is _____ is proprietary product technology.
 A. widely shared among firms
 B. unique to a country
 C. unique to the firm
 D. unique to a particular industry
 E. unique to the location
49. For international businesses that source worldwide, scheduling problems can be worsened by the _____ between the firm and its suppliers.
 A. time and distance
 B. differences in regulations
 C. cultural differences
 D. political conflicts
 E. geographic distance and trade restrictions
50. The advantages of buying component parts from independent suppliers are that it gives the firm the following advantages:
 A it may help the firm to capture orders from international customers, facilitates the scheduling of . adjacent processes and, greater flexibility.
 B. greater flexibility, facilitates the scheduling of adjacent processes and, protects proprietary production technology.
 C facilitates investments in highly specialized assets, protects proprietary product technology and, . facilitates the scheduling of adjacent processes.
 D greater flexibility, it can help drive down the firm's cost structure and, it may help the firm to capture . orders from international customers.
 E. provides offsets, improved costs and new technologies
51. The greatest advantage of buying component parts from independent suppliers is:
 A. lower costs.
 B. offsets.
 C. supports TQM.
 D. strategic flexibility.
 E. increased market penetration

52. Although vertical integration is often undertaken to _____, it may have the opposite effect.
- A. increase customers
 - B. lower costs
 - C. find new suppliers
 - D. market internationally
 - E. improve quality
53. Vertical integrating the manufacture of component parts increases an organization's scope, and the resulting increase in organizational complexity can raise a firm's cost structure. Which of the following is not a reason for this?
- A. Vertically integrated firms have to determine appropriate prices for goods transferred to subunits within the firm.
 - B. The greater the number of subunits in an organization, the greater are the problems of coordinating and controlling those units.
 - C. The firm that vertically integrates into component part manufacture may find that because its internal suppliers have a captive customer in the firm, they lack an incentive to reduce costs.
 - D. Vertically integrated firms have to find a way to distribute supplies to each subunit within a reasonable time frame.
 - E. the greater the number of subunits the greater the amount of information that must be managed
54. The term _____ refers to the practice of outsourcing the production of some component parts to a foreign country in hopes that it may help the firm capture more orders from that country.
- A. reciprocal trade tactic
 - B. neutralize trade
 - C. countertrade
 - D. offset
 - E. buyback
55. According to the textbook, the benefits of manufacturing components in-house seem to be greatest when all of the following factors are involved except:
- A. when highly specialized assets are involved
 - B. when the firm is simply more efficient than external suppliers at performing a particular activity
 - C. when maximum flexibility is necessary
 - D. when vertical integration is necessary for protecting proprietary technology
 - E. when trade barriers are low
56. An example of a(n) _____ relationships is Kodak's cooperative relationships with Canon.
- A. operating arrangement
 - B. firm-to-firm cooperative arrangement
 - C. integral form of integration
 - D. strategic alliance
 - E. supplier alliance
57. Since issues of strategic flexibility and organizational control loom even larger for international businesses than purely domestic ones, international business should be particularly wary of _____ into component part manufacture.
- A. horizontal integration
 - B. increased diversification
 - C. vertical integration
 - D. strategic integration
 - E. global integration

58. Pestell Shavings success demonstrates which key factor that contributes to effective global materials management.
- A. hiring the right logistics partner
 - B. the need for government assistance
 - C. expanding slowly
 - D. product specialization and minimal processing
 - E. be aware of one's environment
59. In general, the trends toward just-in-time systems (JIT), computer-aided design (CAD), and computer-aided manufacturing (CAM) seem to have increased pressures for firms to establish _____ relationships with their suppliers.
- A. strictly arms-length
 - B. intermediate term
 - C. long-term
 - D. short-term
 - E. closer
60. What is the potential for reducing costs through more efficient materials management?
- A. enormous
 - B. moderate
 - C. minor
 - D. insignificant
 - E. unknown
61. According to the textbook, for the typical manufacturing firm, material costs account for between _____ percent of revenues depending on the industry.
- A. 15-25
 - B. 30-40
 - C. 50-70
 - D. 70-80
 - E. 80-90
62. What can a firm end up limiting by the commitments it makes to its alliance partners when it enters long-term alliances?
- A. Choice of suppliers
 - B. Trade availability
 - C. Decision freedom
 - D. Strategic flexibility
 - E. Financial risk
63. Pioneered by _____ firms during the 1950s and 1960s, just-in-time inventory systems now play a major role in most manufacturing firms.
- A. German
 - B. American
 - C. Japanese
 - D. British
 - E. Canadian
64. The basic philosophy behind _____ is to economize on inventory holding costs by having materials arrive at a manufacturing plant when needed to enter the production process?
- A. management by objectives
 - B. reengineering
 - C. just-in-time
 - D. total quality management
 - E. CAD/CAM

65. In the context of materials management, the acronym JIT stands for:
- A. Jobber-In-Training
 - B. Job-In-Transit
 - C. Joint-In-Transpiration
 - D. Just-In-Time
 - E. Join-Integrate-Transfer
66. Under a _____ system, parts enter the manufacturing process immediately; they are not warehoused.
- A. just-in-time
 - B. reengineering
 - C. soft manufacturing
 - D. maximum fluency
 - E. flexible manufacturing
67. Unlike in a traditional system, _____ are spotted right away under a JIT system.
- A. defective inputs
 - B. increasing costs
 - C. illegal operations
 - D. machinery problems
 - E. wastage
68. What system has a drawback that leaves a firm without a buffer stock of inventory?
- A. total-quality management
 - B. just-in-time
 - C. management by objectives
 - D. reengineering system
 - E. CAD/CAM
69. In the context of materials management, the acronym EDI stands for:
- A. Electronic Data Intelligence
 - B. Eliminate Distribution Intermediaries
 - C. Eastern Distribution Interchange
 - D. Effective Data Interchange
 - E. Electronic Data Interchange
70. According to the textbook, what systems require Internet-based computer links between a firm, its suppliers, and its shippers?
- A. electronic data interchange
 - B. electronic data intelligence
 - C. elastic data interchange
 - D. elastic demographic interchange
 - E. effective data interchange
71. _____ enable a firm to optimize its production scheduling according to when components are expected to arrive by tracking component parts as they are shipped to an assembly plant.
- A. Management systems
 - B. Information systems
 - C. Suppliers
 - D. Distributors
 - E. Collaborative intranets
72. Suppliers typically use a(n) _____ link to send invoices to purchasers.
- A. elastic demographic interchange
 - B. elastic data interchange
 - C. electronic data intelligence
 - D. electronic data interchange
 - E. internet

73. Which of the following is a consequence of an EDI system?
- A. Production costs are increased
 - B. Most paperwork between suppliers, shippers, and the purchasing firm is eliminated
 - C. It is difficult for suppliers, shippers, and the purchasing firm to communicate due to the complexity and slowness of the system
 - D. Flexibility and responsiveness of the supply system is decreased
 - E. the potential for industrial espionage increases
74. Better management of its global supply chain has helped Timberland to grow since the 1990s.
True False
75. Materials management is the activity that controls the transmission of physical materials through the value chain, from procurement through production and into distribution.
True False
76. Two important objectives shared by manufacturing and materials management are to lower costs and to simultaneously increase product quality.
True False
77. Reengineering is the main management technique that companies are using to boost their product quality.
True False
78. A standard designed to assure the quality of products and processes is referred to as ISO 9000.
True False
79. ISO 9000 is an Asian quality certification process.
True False
80. Political economy, culture, and relative factors costs are similar across the countries of the world.
True False
81. The concept of economies of scale tells us that as plant output expands, unit costs increase.
True False
82. Flexible manufacturing technologies allow a company to produce a wider variety of end products at a unit cost that at one time could be achieved only through the mass production of a standardized output.
True False
83. Unique in their ability to help companies produce highly standardized products for a global clientele are flexible manufacturing technologies.
True False
84. A product with a high value-to-weight ratio is expensive and does not weigh very much.
True False
85. The arguments for concentrating production at a few choice locations are strong when fixed costs are substantial, the minimum efficient scale of production is high, and flexible manufacturing technologies are not available.
True False
86. Needs that are the same all over the world are called global needs.
True False
87. Concentrating a firm's manufacturing facilities in an optimal location and serving the world market from that single location makes sense when trade barriers are low.
True False
88. When the product's value-to-weight ratio is high decentralizing a firm's manufacturing facilities in various regional or national markets that are close to major markets makes sense.
True False

89. Pressures from the centre to improve a factory's cost structure and/or customize a product to the demands of consumers in a particular nation can start a chain of events that ultimately leads to development of additional capabilities at that factory.
True False
90. A source of improvement in the capabilities of a foreign factory can be the indreasing abundance of advanced factors of production in the nation where the factory is located.
True False
91. The decision about whether a firm should make or buy the component parts that go into the final product is referred to as a sourcing decision.
True False
92. Make-or buy decisions are even more problematic for international businesses.
True False
93. Technology unique to a firm is proprietary product technology.
True False
94. Scheduling problems, for international businesses that source worldwide, are nonexistent, even though there is time and distance between the firm and its suppliers.
True False
95. The greatest advantage of buying component parts from independent suppliers is that the firm can maintain its flexibility.
True False
96. The benefits of manufacturing components in-house seem to be greatest when highly specialized assets are involved, when vertical integration is necessary for protecting proprietary technology, or when the firm is simply more efficient than external suppliers at performing a particular activity.
True False
97. Increased utilization of JIT inventory systems, CAD, and CAM over the past 15 years seems to have decreased pressures for firms to establish long-term relationships with suppliers, but increased the pressure to establish short-term ones.
True False
98. Some businesses have been able to achieve the gains of vertical integration without encountering its problems by entering into strategic alliances with suppliers.
True False
99. To economize on inventory holding costs by having materials arrive at a manufacturing plant just in time to enter the production process and not before is the basic philosophy of CAD.
True False
100. Good EDI systems can help a firm decentralize materials management decisions to the plant level by giving corporate-level managers the information they need for coordinating and controlling decentralized materials management groups.
True False
101. Define the term "materials management." Discuss the relationship between materials management and logistics.

102. Discuss the overall objectives of international firms in terms of manufacturing and materials management.
103. Define the term "total quality management (TQM)." What is the relationship between TQM and manufacturing?
104. How does an international firm decide where to locate its manufacturing activities? Include in your answer a discussion of country factors, technological factors, and product factors.
105. Describe the terms flexible manufacturing and mass customization.
106. What are Make-or-Buy Decisions? What are the advantages of make versus buy and visa-versa? Are these decisions harder for international opposed to strictly domestic firms? Explain your answer.
107. Discuss the advantages of entering into strategic alliances with suppliers? In general, is alliance formation a good idea for international firms?

108. Describe the concept of "Just-In-Time" manufacturing. What are the advantages and disadvantages of the Just-In-Time system?
109. The losses resulting from Hurricane Floyd affected Ontario also. A Daimler Chrysler plant in Greenville, North Carolina was flooded as a result of the hurricane. This in turn resulted in a shortage of suspension parts for the minivan plant in Windsor, Ontario. Strikes and other labour actions can also have an extreme impact on plants using JIT systems. This illustrates a problem with JIT, when companies are located relatively close to one another. Can JIT be used when plants are scattered all over the world.
110. Among the reasons for establishing wholly owned subsidiaries was the requirement for rigorous quality control. TQM is one of the approaches that companies use to manage and control quality. TQM requires a very high degree of cooperation between all of the members of the value chain if it is to be effective. Discuss this.

Chapter 15 Key

1. (p. 482) B
2. (p. 485) C
3. (p. 485) C
4. (p. 485) B
5. (p. 486, 487) C
6. (p. 486) E
7. (p. 486) A
8. (p. 486) D
9. (p. 486) B
10. (p. 486) A
11. (p. 486, 487) B
12. (p. 487) D
13. (p. 487) B
14. (p. 488) D
15. (p. 488) A
16. (p. 488) B
17. (p. 489) A
18. (p. 488, 489) C
19. (p. 489) B
20. (p. 489) C
21. (p. 489) B
22. (p. 490) B
23. (p. 490) D
24. (p. 490) B
25. (p. 490) C
26. (p. 490) D
27. (p. 490) C
28. (p. 490) D
29. (p. 490, 491) D
30. (p. 492) B
31. (p. 492) A
32. (p. 492) A
33. (p. 492) D
34. (p. 492) C
35. (p. 492, 493) A
36. (p. 492) E

37. (p. 492, 493) B
38. (p. 492, 493) A
39. (p. 493) A
40. (p. 493) D
41. (p. 494) B
42. (p. 494) A
43. (p. 494, 495) A
44. (p. 495, 496) C
45. (p. 496) C
46. (p. 496) A
47. (p. 497) E
48. (p. 497) C
49. (p. 498) A
50. (p. 498) D
51. (p. 498) D
52. (p. 498) B
53. (p. 498-500) D
54. (p. 500) D
55. (p. 498) C
56. (p. 501) D
57. (p. 501) C
58. (p. 499) E
59. (p. 501) C
60. (p. 502, 503) A
61. (p. 502) C
62. (p. 501) D
63. (p. 502) C
64. (p. 502) C
65. (p. 502) D
66. (p. 502) A
67. (p. 502) A
68. (p. 502) B
69. (p. 502) E
70. (p. 502) A
71. (p. 502) B
72. (p. 502) D
73. (p. 502, 503) B
74. (p. 482, 483) TRUE

75. (p. 485) TRUE

76. (p. 485, 486) TRUE

77. (p. 486) FALSE

78. (p. 487) TRUE

79. (p. 487) FALSE

80. (p. 487, 488) FALSE

81. (p. 489) FALSE

82. (p. 490) TRUE

83. (p. 490) FALSE

84. (p. 492) TRUE

85. (p. 493) FALSE

86. (p. 492, 493) FALSE

87. (p. 492) TRUE

88. (p. 493) FALSE

89. (p. 494) TRUE

90. (p. 494) TRUE

91. (p. 496) TRUE

92. (p. 496) TRUE

93. (p. 497) TRUE

94. (p. 498) FALSE

95. (p. 498) TRUE

96. (p. 497-498) TRUE

97. (p. 501) FALSE

98. (p. 501) TRUE

99. (p. 502) FALSE

100. (p. 502, 503) TRUE

101. (p. 485) Materials management can be defined as "the activity that controls the transmission of physical materials through the value chain, from procurement through production and into distribution." Materials management includes logistics, which refers to the procurement and physical transmission of material through the supply chain, from suppliers to customers.

The second two objectives that are shared by the majority of international firms in this area relate directly to their international efforts. First, a firm's manufacturing and materials management functions must be able to accommodate demands for local responsiveness. For instance, a Canadian exporter may have to vary the design of a product that is manufactured and sold in North America to meet European standards. Second, a firm's manufacturing and materials management function must be able to respond quickly to shifts in consumer demand. For instance, if a trend developed in Asia towards a preference for lower-fat foods, the importers of food products to Asia that respond to this trend the most rapidly would have a substantial advantage.

102. (p. 485, 486) International firms have four principle objectives in the area of manufacturing and materials management. The first two objectives are to lower costs and increase quality. In this respect, international firms are no different than their strictly domestic counterparts. Cost reductions can be realized through improved efficiency and through eliminating defective products from both the supply chain and the manufacturing process. Implementing Just-In-Time manufacturing is an important step in achieving these objectives. Quality improvement can be realized through a number of initiatives, including total quality management (TQM) and ISO 9000 certification.

103. (p. 486) TQM is a management philosophy that takes as its central focus the need to improve the quality of a company's products and services. TQM is the main management technique that is utilized to improve the quality of the products that emerge from manufacturing processes.

As this discussion indicates, location decisions are complex for international firms. A consideration and weighing of all of the issues involved will result in the best overall decision.

Product Factors: Two product features impact location decisions. The first is the product's value-to-weight ratio because of its influence on transportation costs. If a product has a high value-to-weight ratio, like semiconductors, it can be shipped around the world, and the shipping cost would represent only a small portion of the total cost of the product. Conversely, a product with a low value-to-weight ratio, like soft drinks, almost have to be mixed and bottled in the location in which they are sold, because the cost of shipping a 50 cent can of Coke from one country to another would represent a significant part of the value of the product. The second product consideration pertains to whether the product serves universal needs. If so, the need for local responsiveness is reduced, and the product can be produced at its ideal location.

Technological Factors: The three primary factors that drive location decisions in terms of technology are a manufacturing activity's level of fixed costs, its minimum efficient scale, and its flexibility. In terms of fixed costs, when the fixed costs of setting up a manufacturing operation are high, a firm must serve the world market from a single location or from a few locations. This is the case with aircraft manufacturing, for example. On the other hand, when fixed costs are low, a firm can scatter its manufacturing activities throughout the world to better accommodate local markets. In terms of minimum efficient scale, the larger the minimum efficient scale of a plant, the greater is the argument for centralized production at a single location. This factor motivates companies like Caterpillar Tractor, which makes heavy construction equipment in huge plants, to locate in a single location. Finally, in regard to flexibility, when flexible manufacturing technologies are available, a firm can manufacture products customized to various national markets at a single factory at the optimal location.

Other country specific factors play a role in location decisions. These factors include formal and informal trade barriers and rules and regulations regarding foreign direct investment. Another country factor is expected movements in currency exchange rates. Adverse changes in exchange rates can quickly alter a country's attractiveness as a manufacturing site. Firms should consider the potential living conditions of their expatriate managers when making locations decision, and also the quality of the local labour pool.

Country Factors: This is a large area of consideration, which encompasses a lot of factors. As described throughout the textbook, the advantage of producing in one country opposed to another varies along a number of dimensions. In Chapter 5, for example, we saw that due to differences in factor costs, certain countries have a comparative advantage for producing certain products. In Chapters 2 and 3 we saw how differences in political economy and national culture influence the desirability of location decisions. In this regard, all other things being equal, a firm should locate its manufacturing activities in countries that have hospitable political, economy, and factor cost environments.

104. (p. 487-494) The key factors involved in making location decisions, which entail the dual considerations of minimizing costs and increasing quality, can be grouped under three broad headings: country factors, technological factors, and product factors.

105. (p. 490) The term flexible manufacturing-or lean production as it is often called-covers a range of manufacturing that are designed to (a) reduce setup times for complex equipment, (b) increase utilization of individual machines through better scheduling, and (c) improve quality control at all stages of the manufacturing process. Flexible manufacturing technologies allow a company to produce a wider variety of end products at a unit costs that at one time could be achieved only through the mass production of a standardized output. The term mass customization has been coined to describe this ability. Mass customization implies that a firm may be able to customize its product range to suit the needs of different customer groups without bearing a cost penalty. Research suggests that the adoption of flexible manufacturing technologies may increase efficiency and lower unit costs relative to what can be achieved by the mass production of a standardized output.

The make-buy decision is harder for international firms than domestic firms because their decision set is simply more complex. For instance, it may appear desirable to purchase parts from a foreign supplier, but what about political stability in the supplier's country, foreign exchange risk, and the host of other questions that must be answered in international trade?

The Advantages of Buy: The advantages of buying component parts from independent suppliers is that it gives the firm greater flexibility, it can help drive down the firm's cost structure, and it may help the firm to capture orders from international customers. In regard to flexibility, by outsourcing the manufacture of its component parts, a firm can switch suppliers as circumstances dictate. This could provide a firm a substantial advantage in a rapidly changing environment. In terms of costs, using suppliers to manufacture component parts allows a firm to narrow its scope, and the resulting administrative overhead costs may be smaller. Finally, an advantage of buying rather than making component parts is that the relationships that are established through buying parts may lead to sales of the firm's final product. For example, if a Canadian firm negotiated the purchase of component parts from several Brazilian firms, which would put the Canadian firm in a position to develop a network of contacts in Brazil, that might ultimately result in sales of its finished product.

The Advantages of Make: The arguments that support making component parts in-house (i.e. vertical integration) include: lower costs, facilitating specialized investments, proprietary product technology protection, and improved scheduling. In terms of lower costs, it may pay a firm to manufacture its own component parts, if no cheaper source (assuming quality remains consistent) is available. In terms of facilitating specialized investments, when a firm needs a component part that is highly customized and specialized, it is often best for the firm to manufacture the part itself. Having a supplier manufacture the part would be awkward, because the supplier would rely strictly on one buyer to purchase the part and the buyer would typically have only the one supplier to furnish the part. In terms of protecting proprietary product technology, the more involvement that a firm has with suppliers, the more likely it is that proprietary information will be lost. As a result, a firm that has highly sensitive proprietary technology may be ahead to produce its own component products. Finally, improved scheduling can result from producing in-house rather than relying upon suppliers. The author of the textbook indicates that this is the weakest argument for vertical integration.

106. (p. 496-501) A make-or-buy decision pertains to whether a business should make or buy the component parts that go into its final product. In other words, should a firm vertically integrate to manufacture its own component parts or should it purchase the parts from outside suppliers? For many firms, the make-or-buy decision is a difficult one, because there are good arguments to support either position.

There is no right or wrong answer to the question of whether alliances are good or bad for international businesses. This topic, however, provides an excellent forum for classroom discussion.

There are a number of advantages and disadvantages of alliances that may be pointed out by students. The advantages include a sharing of production costs and risks, along with joint marketing and R&D. Also, the long-term relationship that develops between the alliance partners may engender trust and be beneficial for both firms. On the other hand, many of the disadvantages of using suppliers rather than producing products in-house apply to strategic alliances. For instance, proprietary technology may be lost to an alliance partner. This represents a compelling disadvantage of strategic alliances, particularly if the alliance partners are in the same industry.

107. (p. 501) This question is designed to elicit classroom discussion. It is also a good "thought" question for an exam. The number of strategic alliances between firms from different countries is growing and is becoming an increasingly important option for international firms. For example, in recent years we have seen an alliance between Kodak and Canon, under which Canon builds photocopiers to be sold by Kodak.

108. (p. 502) The basic philosophy behind just-in-time (JIT) manufacturing is to economize on inventory holding costs by having materials arrive at a manufacturing plant "just in time" to enter the product process. This results in potential cost savings and quality improvements. The cost savings come from speeding up inventory turnover, thus reducing inventory holding costs, as well as warehousing and storage costs. In addition, JIT systems can lead to quality improvements. Under a JIT system, parts enter the manufacturing process immediately. This allows defective inputs to be spotted right away. The problem can then be traced to the supply source and fixed before more defective parts are produced. The disadvantage of a JIT system is that it leaves a firm without a buffer stock of inventory. As a result, a labour dispute at a supplier's plant or a disruption in the transportation system (such as the UPS strike) could leave a manufacturer without adequate component parts.

109. (p. 502) The student could argue that JIT is much more difficult to implement and depends on an extremely reliable supplier system that will not be disrupted by strikes or other types of actions. Nature has an impact also and accepting that global warming is a reality, there is a strong potential for increased violent weather. This will lead to even more disruptions. In fact these factors may in part be an argument for not locating plants overseas or locating plants together with their suppliers geographically adjacent to one another.

110. (p. 498-500) The student could answer that the growth of international outsourcing is a clear example of this. However, the need for cooperation suggests that factors other than cost have an important impact on the outsourcing decision.

Chapter 15 Summary

<u>Category</u>	<u># of Questions</u>
Difficulty: Easy	33
Difficulty: Hard	20
Difficulty: Medium	57
Hill - Chapter 15	110