CHAPTER 15
MANAGING INTERNATIONAL OPERATIONS

LEARNING OBJECTIVES:
1. Identify the elements that are important to consider when formulating production strategies.
2. Identify key considerations when acquiring physical resources.
3. Identify several production matters that are of special concern to managers.
4. Describe the three potential sources of financing and the main financial instruments of each.

CHAPTER OUTLINE:

Introduction
Production Strategy
   Capacity Planning
   Facilities Location Planning
      Location Economies
      Centralization Versus Decentralization
   Process Planning
      Standardization Versus Adaptation
   Facilities Layout Planning
Acquiring Physical Resources
   Make-or-Buy Decision
      Reasons to Make
         Lower Costs
         Greater Control
      Reasons to Buy
         Lower Risk
         Greater Flexibility
         Market Power
         Barriers to Buying
Raw Materials
Fixed Assets
Key Production Concerns
   Quality-Improvement Efforts
      Total Quality Management
      ISO 9000
   Shipping and Inventory Costs
   Reinvestment Versus Divestment
Financing Business Operations
   Borrowing
   Issuing Equity
      Issuing American Depository Receipts
         Advantages of ADRs
      Venture Capital
      Emerging Stock Markets
Internal Funding
   Internal Equity, Debt, and Fees
   Revenue from Operations
Capital Structure
A Final Word
A comprehensive set of specially designed PowerPoint slides (designated ‘PPT’ below) is available for use with Chapter 15. These slides and the lecture outline below form a completely integrated package that simplifies the teaching of this chapter’s material.

**Lecture Outline**

1. **INTRODUCTION**
   Essential to success in international markets are production strategies, including the decision to centralize or decentralize production and standardize or adapt production to national markets.

2. **PRODUCTION STRATEGY (PPT #3)**
   Careful planning of production helps companies cut costs to become low-cost leaders and to design new products or product features necessary for a differentiation strategy.

   **A. Capacity Planning (PPT #4)**
   1. Assessing a company’s ability to produce enough output to satisfy market demand.
   2. If capacity now used is greater than the expected market demand, production must be scaled back.
   3. Countries have different laws regulating the ability of employers to eliminate jobs; depending on the country, a firm may or may not need to give advance notice of layoffs or plant closings.
   4. If market demand is growing, managers must determine in which facilities to expand production or whether additional facilities are needed to expand capacity.
   5. Capacity planning is also extremely important for service companies.

   **B. Facilities Location Planning (PPT #5)**
   1. Selecting a location for production facilities.
   2. Key environmental factors in planning include the cost and availability of labor and management, raw materials, component parts, and energy. Other factors include political stability, the extent of regulation and bureaucracy, economic development, and the local culture, including beliefs about work and important traditions.
   3. Reducing production costs through lower wages is often essential to keep products at competitive prices, especially when labor accounts for a large portion of total production. Lower wages must be balanced against worker productivity, which is lower in developing and emerging nations.
   4. Service companies must locate near their customers and consider customers’ needs when locating facilities.
   5. Supply issues are important in location planning; the greater the distance between production facilities and target markets, the longer it takes for customers to receive shipments.
   6. Marketing managers must compensate for delays by maintaining larger inventories in target markets—adding to storage and insurance costs.
7. Shipping costs are greater when production is conducted far from target markets. Transportation costs are a driving force behind the globalization of the steel industry.

8. Location Economies
   a. Economic benefits derived from locating production activities in optimal locations.
   b. Companies undertake business activities in a location or obtain products and services from companies located there.
   c. The key fact is that each production activity generates more value in a particular location than could be generated elsewhere. The productivity of a location is heavily influenced by labor and capital.

9. Centralization versus Decentralization
   a. Centralized production refers to the concentration of production facilities in one location. Decentralized production spreads facilities over several locations and could mean one facility for each business environment.
   b. Companies often centralize production facilities in pursuit of low-cost strategies and to take advantage of economies of scale.
   c. Transportation costs and the physical landscape affect the centralization versus decentralization decision.
   d. Because they typically sell undifferentiated products in all markets, low-cost competitors do not need to locate near their markets to respond to changes in buyer preferences. They choose locations with the lowest combined production and transportation costs.
   e. Firms must balance the cost of getting inputs into production and getting products to market.
   f. Companies with differentiated products find decentralized production the better option; locating separate facilities near different markets, they remain close to customers and respond to buyer preferences.
   g. When R&D and manufacturing most cooperate for differentiation, they tend to be located in the same place, although today technology allows for separate locations.

C. Process Planning (PPT #6)
1. Deciding the process a company will use to create its product.
2. Low-cost strategies require large-scale production because producers want the cost savings of economies of scale.
3. Differentiation strategies demand extra value by offering something unique, such as superior quality, added features, or special brand images.
4. Availability and cost of labor in the local market is crucial to process planning; if labor in the host country is cheap, a company opts for less technology and more labor-intensive methods in production.
5. Standardization versus Adaptation
   a. The production process must be standardized or adapted for different markets.
   b. Large production batches reduce the cost of producing each unit, offsetting the higher initial investment in automation; costs are
further reduced as employees improve through repetition and learning.

c. Differentiation demands decentralized facilities to improve local responsiveness; decentralized production facilities produce for one national or a regional market, and tend to be smaller. This eliminates economies of scale and increases per-unit production costs. R&D costs are higher for products with special product designs, styles, and features.

D. Facilities Layout Planning (PPT #7)
   1. Deciding the spatial arrangement of production processes within production facilities.
   2. Facility layout depends on the type of production process, which depends on a company’s business-level strategy.

3. ACQUIRING PHYSICAL RESOURCES (PPT #8)
   International companies must acquire physical resources to begin operations. They must decide whether to make or buy the components for production processes. What will be the sources of any required raw materials? Will the company acquire facilities and production equipment or build its own?

A. Make-or-Buy Decision (PPT #9-10)
   Deciding whether to make a component or buy it from another company.
   1. Reasons to Make
      Vertical integration is the process by which a company extends its control over additional stages of production—either inputs or outputs. When a company makes a product, it engages in “upstream” activities: Production activities that precede current business operations.
      a. Lower Costs
         i. The company decides to make the products rather than buy them in order to reduce total costs.
         ii. Companies use in-house production when it costs less than buying on the open market.
         iii. Small companies are less likely to make rather than buy, except if the company possesses technology or another competitive advantage.
      b. Greater Control
         i. Making rather than buying can give managers greater control over raw materials, product design, and the production process itself—all of which are important factors in product quality.
         ii. Companies often undertake in-house production when persuading a supplier to make special modifications to a product on their behalf is difficult.
         iii. Companies keep greater control over product design and features if they manufacture components themselves.
         iv. Companies also make rather than buy when buying requires providing key technology.
   2. Reasons to Buy
      a. Outsourcing is the practice of buying from another company a good or service that is not central to a company’s competitive
advantage. Outsourcing results from continuous specialization and technological advancement.

b. By outsourcing, a company reduces vertical integration and its overall amount of specialized skills and knowledge.

c. “Stealth manufacturing” calls for outsourcing the assembly of computers plus shipping to distributors and other intermediaries.

d. Outsourcing is catching on in the pharmaceutical industry.

e. Lower Risk
   i. Social unrest or open conflict can threaten physical facilities, equipment, and employee safety.
   ii. Eliminate the exposure of assets to political risk by refusing to invest in plants and equipment abroad; it can purchase products from international suppliers.
   iii. Eliminates the need to purchase expensive insurance coverage needed in an unstable country. But does not completely shield the buyer from disruptions; political instability can cause delays in receiving needed parts.

f. Greater Flexibility
   i. Making in-house products that require huge investment in equipment and buildings often reduces flexibility.
   ii. Companies that buy products from one or more outside suppliers retain or gain flexibility. Added flexibility is key in a change of attitude toward outsourcing.
   iii. Maintaining flexibility is important when the national business environments of suppliers are volatile. Buying from several suppliers or establishing production facilities in several countries allows outsourcing from one location if instability erupts in another.
   iv. Volatility in exchange rates can increase or decrease the cost of importing; by buying from multiple suppliers in several countries, a company maintains the flexibility to change sources and reduce risk.
   v. Companies maintain operational flexibility by not investing in production facilities; unencumbered by investment in production equipment, a firm can alter its product line very quickly.
   vi. A company has financial flexibility if its capital is not locked up in plants and equipment; it uses excess capital to pursue opportunities.

g. Market Power
   i. Companies can gain power in their relationships with suppliers by becoming important customers.
   ii. Sometimes a supplier becomes a hostage to one customer when the supplier depends on a company with its production capacity; if the buyer outsources elsewhere, the supplier has few other customers.
   iii. This situation gives the buyer significant control in dictating quality improvements, forcing cost reductions, and making special modifications.

h. Barriers to Buying
i. Companies sometimes face obstacles when purchasing products from international suppliers.

ii. The government of the buyer’s country may impose import tariffs to improve the balance of trade.

iii. The services provided by intermediaries increase the cost of buying abroad.

B. Raw Materials
1. The twin issues of quality and quantity drive many decisions about raw material acquisition.
2. Some industries and companies rely almost exclusively on the quantity of locally available raw materials.
3. Raw material quality has a huge influence on the quality of a company’s end product.

C. Fixed Assets
1. *Fixed assets* are company assets such as production facilities, inventory warehouses, retail outlets, and production and office equipment.
2. Companies can (1) acquire or modify existing factories, or (2) build new facilities—called a *greenfield* investment.
3. Considering either option involves many individuals, such as production managers, site-acquisition experts, legal staff, and public relations staff.
4. Local infrastructure must support proposed on-site business operations.

4. KEY PRODUCTION CONCERNS
How manufacturing operation companies maximize quality and minimize shipping and inventory costs, and important reinvestment versus divestment decisions.

A. Quality Improvement Efforts (PPT #11)
1. Companies strive toward quality improvement for two reasons: costs and customer value.
2. Quality products keep production costs low by reducing waste in valuable outputs, reducing the cost of retrieving defective products, and reducing disposal costs due to defective products.
3. Some minimum level of acceptable quality is an aspect of every product today. A company that combines a low-cost position with a high-quality product can gain a competitive advantage.
4. Improving quality is important for service providers; quality is complex because a service is created and consumed at the same time. The interaction between an employee who delivers a service and the buyer is part of service quality.
5. Activities conducted prior to service delivery are also important.
6. Total Quality Management
   a. Emphasis on continuous quality improvement to meet or exceed customer expectations. It places responsibility on each individual to focus on the quality of output.
   b. By continuously improving quality, a company differentiates itself from rivals and attracts loyal customers.
7. ISO 9000
a. The International Standards Organization (ISO) 9000 is an international certification that companies receive when they meet the highest quality standards in their industries.
b. To become certified, companies must demonstrate the reliability and soundness of all business processes affecting the quality of their products.

B. Shipping and Inventory Costs (PPT #12)
1. Shipping costs can have a dramatic effect on the cost of getting materials and components to the location of production facilities.
2. Shipping costs are affected by a nation’s business environment, such as its level of economic development, including the condition of seaports, airports, roads, and rail networks.
3. Because storing inventory is costly, companies adopt just-in-time (JIT) manufacturing—in which inventory is kept to a minimum and inputs to production arrive exactly as needed.
4. JIT drastically reduces the costs of large inventories and reduces wasteful expenses because defective materials and components are spotted quickly during production.

C. Reinvestment versus Divestment (PPT #13)
1. Managers need to decide whether to invest further in operations abroad or to reduce or divest international operations.
2. Companies continue investing in markets requiring long payback periods if the outlook is good.
3. Companies reinvest when a market is experiencing rapid growth. Investing in expanding markets is attractive because potential customers may not yet be loyal to the products of any one company or brand.
4. Companies scale back their international investments when it is apparent that profitability will take longer than expected.
5. Problems in the political, social, or economic sphere can force companies either to reduce investment or eliminate operations altogether.
6. Companies invest in operations offering the best return on investment; this means reducing investments or divesting operations in profitable markets to invest in more profitable opportunities elsewhere.

5. FINANCING BUSINESS OPERATIONS (PPT #14)
Companies need financial resources to pay for operating expenses and investment projects. They must: buy raw materials and component products for manufacturing and assembly activities; need capital for expanding production capacity or entering new geographic markets; and need financing to pay for training and development, to compensate workers and managers, and to advertise.

A. Borrowing (PPT #15-16)
1. International companies (like domestic companies) try to get the lowest interest rates possible on borrowed funds.
2. Difficulties include exchange-rate risk, restrictions on currency convertibility, and restrictions on the international flow of capital.
3. Borrowing locally can be advantageous, especially when the value of the local currency has fallen against that of the home country. But companies
are not always able to borrow funds locally; they are forced to seek international sources of capital.

4. A back-to-back loan is a loan in which a parent company deposits money with a host-country bank, which then lends it to a subsidiary located in the host country.

B. Issuing Equity (PPT #17-18)

The international equity market consists of all stocks bought and sold outside the home country of the issuing company. Companies issue such stock primarily to access pools of investors with funds that are unavailable domestically. Yet, getting shares listed on another country’s stock exchange can be a complex process. Complying with all the rules and regulations governing a stock exchange costs time and money.

1. Issuing American Depository Receipts
   a. To maximize international exposure, non–U.S. companies list themselves on U.S. stock exchanges. A non-U.S. company can list shares in the U.S. by issuing American Depository Receipts (ADRs)—certificates that trade in the United States and represent a specific number of shares in a non-U.S. company.
   b. International companies also use Global Depository Receipts (GDRs), which are similar to ADRs but are listed and traded in London and Luxembourg.
   c. There are several advantages of ADRs. Investors who buy ADRs pay no currency-conversion fees, and there are no minimum purchase requirements. Also, companies offer ADRs in the U.S. to appeal to mutual funds because U.S. investment laws limit the amount that a mutual fund can invest in companies not registered on U.S. exchanges.

2. Venture Capital
   a. Venture capital is financing obtained from investors who believe that the borrower will experience rapid growth and receive equity (part ownership) in return.
   b. Venture capitalists invest in new risky ventures because they can generate large returns on investment.
   c. The venture capital industry has become global.

3. Emerging Stock Markets
   a. Companies from countries with emerging stock markets face two problems. First, emerging stock markets commonly experience extreme volatility.
      i. Investments can be either hot money—money that can be quickly withdrawn in a crisis—or patient money—investment in factories, equipment, and land that cannot withdrawn easily.
      ii. Large and sudden sell-offs of equity are signs of market volatility that characterize emerging stock markets. Large sell-offs occur because of uncertainty regarding the nation’s future economic growth.
   b. Second, companies that issue equity on their countries’ emerging stock markets are often plagued by poor market regulation.
      i. Large local companies can wield influence over their domestic stock markets; if domestic shareholders
dominate such exchanges, international investors may hesitate to enter.

ii. The problem lies in regulation that favors insiders over international investors.

C. Internal Funding (PPT #19)

Ongoing business activities and new investments can also be financed internally with funds supplied by the parent company or its international subsidiaries.

1. Internal Equity, Debt, and Fees
   a. Spin-off companies and new subsidiaries require time before becoming financially independent; so, parent companies finance operations.
   b. International subsidiaries obtain capital by issuing equity, purchased solely by the parent, which enjoys influence over the subsidiary’s decisions; the parent earns a return from the appreciating share price.
   c. Parent companies lend money to subsidiaries during the start-up phase and for new investments; subsidiaries with excess cash lend money to parent or sister companies when they need capital.

2. Revenue From Operations
   a. Revenue is earned from the sale of goods and services; this source of capital is the lifeblood of international companies and their subsidiaries.
   b. For long-term success, a company must generate sufficient revenue to sustain day-to-day operations; outside financing is required only to expand operations or to survive lean periods.
   c. A transfer price is the price charged for a good or service transferred between a company and a subsidiary. Companies set subsidiaries’ transfer prices high or low according to their own goals (e.g., to minimize taxes in a high taxation country).

D. Capital Structure (PPT #20-21)

1. A company’s capital structure is the mix of equity, debt, and internally generated funds that it uses to finance its activities.

2. Firms try to strike the right balance among financing methods in order to minimize the cost of capital and risk.

3. Debt requires periodic interest payments to creditors such as banks and bondholders. If the company defaults on interest payments, creditors can sue the company or force it into bankruptcy; preferred stock equity holders can force bankruptcy because of default.

4. Companies prefer not to carry so much debt in relation to equity that it increases its risk of insolvency.

5. Debt appeals to companies because interest payments are deducted from taxable earnings—lowering the taxes a firm must pay.

6. National restrictions can influence the choice of capital structure. Restrictions include limits on international capital flows, the cost of local versus international financing, access to international financial markets, and currency exchange controls.

7. The choice of capital structure for international subsidiaries is a highly complex decision.
6. **A FINAL WORD**

Whether an international company’s production activity involves manufacturing a product or providing a service, it must acquire many resources before beginning operations. It needs to resolve such issues as where it will get raw materials or components, how much production capacity it needs, whether to construct or buy new facilities, the size of service centers, and where it will get financing. The answers to these questions are complex and interrelated.