Chapter

13 Choosing the Right Location and Layout

A decision is the action an executive must take when he has information so incomplete that the answer does not suggest itself.

—Admiral Radford

What are the facts? Again and again and again—what are the facts? Shun wishful thinking, ignore divine revelation, forget what "the stars foretell"—what are the facts and to how many decimal places?

—R. A. Heinlein

LEARNING OBJECTIVES

Upon completion of this chapter, you will be able to:

1. **EXPLAIN** the stages in the location decision: choosing the region, the state, the city, and the specific site.
2. **DESCRIBE** the location criteria for retail and service businesses.
3. **OUTLINE** the location options for retail and service businesses: central business districts (CBDs), neighborhoods, shopping centers and malls, near competitors, outlying areas, and at home.
4. **EXPLAIN** the site selection process for manufacturers.
5. **DESCRIBE** the criteria used to analyze the layout and design considerations of a building, including the Americans with Disabilities Act.
6. **EXPLAIN** the principles of effective layouts for retailers, service businesses, and manufacturers.
7. **EVALUATE** the advantages and disadvantages of building, buying, and leasing a building.

Learning Objective

1. Explain the stages in the location decision: choosing the region, the state, the city, and the specific site.

LOCATION: A SOURCE OF COMPETITIVE ADVANTAGE

Much like choosing a form of ownership and selecting particular sources of financing, the location decision has far-reaching and often long-lasting effects on a small company's future. Entrepreneurs who choose their locations wisely—with their customers' preferences and their companies' needs in mind—can establish an important competitive advantage over rivals who choose their locations haphazardly. Because the availability of qualified workers, tax rates, the quality of infrastructure, traffic patterns, and many other factors vary from one site to another, the location decision is an important one that can influence the growth rate and the ultimate success of a company.

The location selection process is like an interactive computer game where each decision opens the way to make another decision on the way to solving the puzzle. The answer to the puzzle, of course, is the best location for a business. At each step in the decision process, entrepreneurs must analyze how well the characteristics of a particular location match the unique requirements of their businesses. Because of their significant impact on a company, location decisions can be difficult; however, like the interactive computer game, there are lots of clues that guide entrepreneurs to the best decision.

The location decision process resembles a pyramid. The first level of the decision is the broadest, requiring an entrepreneur to select a particular region of the country. (We will address locating a business in a foreign country in Chapter 14, "Global Aspects of Entrepreneurship.") From there, an entrepreneur must choose the right state, then the right city, and finally, the right site within the city. The "secret" to selecting the ideal location lies in knowing which factors are most important to a company's success and then finding a location that satisfies as many of them as possible, particularly those that are most critical. For instance, one of the most important location factors for high-tech companies is the availability of a skilled labor force, and their choice of location reflects this. If physically locating near customers is vital to a company's success, then an entrepreneur's goal is to find a site that makes it most convenient for her target customers to do business with the company.

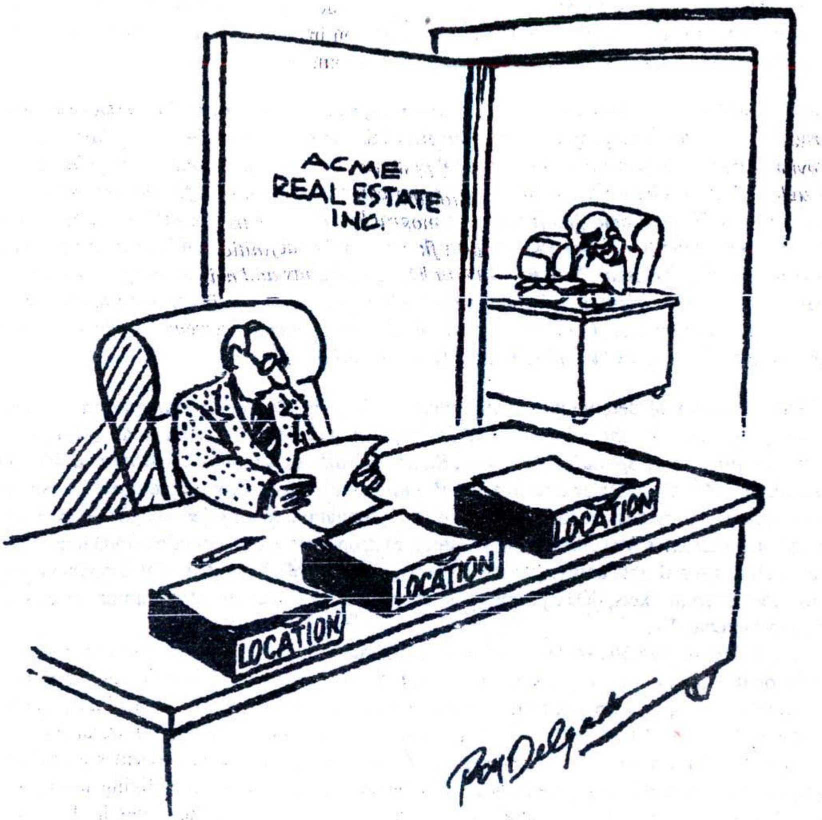
A Company Example

*David Chang, owner of **Coastal Cotton**, a small retail chain specializing in casual cotton clothing, has seen his company grow from a single store in Hialeah, Florida, to 12 locations in outlet centers across the Southeast and in California. Because Coastal Cotton's primary target is bargain-hunting tourists, Chang chooses locations with high concentrations of potential customers. "You have to know your customer base and be strategic about choosing sites," Chang explains.*[1]

The characteristics that make for an ideal location will often vary dramatically from one company to another due to the nature of the business. In the early twentieth century, companies looked for ready supplies of water, raw materials, or access to railroads; today, they are more likely to look for sites that are close to universities and offer high-speed Internet access. In a recent study of 50 metropolitan areas, Cognetics Inc. determined that the factors that made an area most suitable for starting and growing small companies included access to dynamic universities, an ample supply of skilled workers, a nearby airport, and a high quality of life.[2] The key to finding a suitable location is identifying the characteristics that can give a company a competitive edge and then searching out potential sites that meet those criteria.

Choosing the Region

The first step in selecting the best location is to focus at the regional level. Which region of the country has the characteristics necessary for a new business to succeed? Above all, the entrepreneur must always place the customer first in her mind when deciding on a location. As with the preceding example, if your primary customers are bargain-hunting tourists, then the best locations will be where such people gather. Logic demands that facts and figures—not personal preferences—lead an entrepreneur to choose the best location for a specific type of business. Common requirements may include rapid growth in the population of a certain age group, rising disposable incomes, the existence of necessary infrastructure, a nonunion environment, and low costs. At the broadest level of the location decision, entrepreneurs usually determine which regions of the country are experiencing substantial growth. Every year many



Source: FROM THE WALL STREET JOURNAL—PERMISSION, CARTOON FEATURES SYNDICATE.

popular business publications prepare reports on the various regions of the nation—which ones are growing, which are stagnant, and which are declining. Studying shifts in population and industrial growth will give an entrepreneur an idea of where the action is—and isn't. For example, the following key demographics include: How large is the population? How fast is it growing? What is the makeup of the overall population? Which segments are growing fastest? Slowest? What is the population's income? Is it increasing or decreasing? Are other businesses moving into the region? If so, what kind of businesses? Generally, entrepreneurs want to avoid dying regions; they simply cannot support a broad base of potential customers. A firm's customers will be people, businesses, and industry, and if it is to be successful, it must locate in a place that is convenient to them.

One of the first stops entrepreneurs should make when conducting a regional evaluation is the U.S. Census Bureau. Excellent sources of basic demographic and population data include the *U.S. Statistical Abstract* and the *County and City Data Book*. The *U.S. Statistical Abstract* provides entrepreneurs looking for the right location with a multitude of helpful information, ranging from basic population characteristics and projections to poverty rates and energy consumption. Every state also publishes its own statistical abstract, which provides the same type of data for its own population. The *County and City Data Book* contains useful statistics on the populations of all of the nation's 3,141 counties and 12,175 cities with populations exceeding 2,500. In addition to the numerous publications it offers, the Census Bureau makes most of the information contained in its valuable data banks available to entrepreneurs researching potential sites through its easy-to-use World Wide Web site (www.census.gov). There entrepreneurs can access for specific locations vital demographic information such as age, income, educational level, employment level, occupation, ancestry, commuting times, housing data (house value, number of rooms, mortgage or rental status, number of vehicles owned, and so on), and many other characteristics. Sorting through each report's 95 fields, entrepreneurs can prepare customized reports on the potential sites they are considering. These Web-based resources give entrepreneurs instant access to important site-location information that only a few years ago would have taken many hours of intense research to compile!

A Company Example

When Scott Fiore was looking for a location for his natural pharmacy, ***The Herbal Remedy****, he turned first to the demographic data from the U.S. Census Bureau. Not only did his analysis provide him with a picture of the potential customers in each area, but it also pointed him to Douglas County, Colorado, the fastest-growing county in the nation for the second year in a row. The profile that emerged from the demographic data for the county was one of young, affluent, well-educated residents, a perfect fit with Fiore's definition of his target customer. As he drove around the area, Fiore noticed that Douglas County and neighboring Arapaho County were "very sports-oriented, athletic places," which was also consistent with his target audience. More research led Fiore to the town of Littleton, which is conveniently located for customers in both counties but offers relatively low rental rates.*[3]

Other sources of demographic data include *Sales and Marketing Management's Survey of Buying Power*, *Editor and Publisher Market Guide*, *The American Marketplace: Demographics and Spending Patterns*, *Rand McNally's Commercial Atlas and Marketing Guide*, and *Zip Code Atlas and Market Planner*. Published every September, the *Survey of Buying Power* provides a detailed breakdown of population, retail sales, spendable income, and other characteristics for census regions, states, metropolitan areas, counties, and cities. The survey includes highlights and summary sections, analyses of changes in metro markets, projections for metro markets, descriptions of newspaper and TV markets, and summaries of sales of certain merchandise.

The *Editor and Publisher Market Guide* is similar to the *Survey of Buying Power* but provides additional information on markets. The guide includes detailed economic and demographic information, ranging from population and income statistics to information on climate and transportation networks for more than 1,500 key cities in both the United States and Canada.

The American Marketplace: Demographics and Spending Patterns provides useful demographic information in eight areas: education, health, income, labor force, living arrangements, population, race and ethnicity, and spending and wealth. Most of the tables in the book are derived from government statistics, but *The American Marketplace* also includes a discussion of the data in each table as well as a forecast of future trends.

The *Commercial Atlas and Marketing Guide* reports on more than 128,000 places in the United States, many of which are not available through census reports. It includes 11 economic indicators for every major geographic market; tables showing population trends, income, buying power, trade, and manufacturing activity; and large, cross-referenced maps. Its format makes it easy to collect large amounts of valuable data on any region in the country (and specific areas within a region).

The *Zip Code Atlas and Market Planner* is an extremely useful location and market-planning tool. It combines a breakdown of zip codes (often the basis of psychographic customer profiles) with maps featuring physical features such as mountains, rivers, and major highways. The planner contains loose-leaf, full color maps, each with a reusable acetate overlay showing five-digit zip code boundaries for all 50 states and more detailed inset maps for 240 major cities and metropolitan areas.

The task of analyzing various potential locations—gathering and synthesizing data on a wide variety of demographic and geographic variables—is one ideally suited for a computer. In fact, a growing number of entrepreneurs are relying on geographic information systems (GIS), powerful software programs that combine map drawing with database management capability, to pinpoint the ideal location for their businesses. GIS packages allow users to search through virtually any database containing a wealth of information and plot the results on a map of the country, an individual state, a specific city, or even a single city block. The visual display highlights what otherwise would be indiscernible business trends. For instance, using a GIS program, an entrepreneur could plot her existing customer base on a map, with various colors representing the different population densities. Then she could zoom in on those areas with the greatest concentration of customers, mapping a detailed view of zip code borders or even city streets. GIS street files originate in the U.S. Census Department's TIGER (Topographically Integrated Geographic Encoding Referencing) file, which contains map information broken down for every square foot of Metropolitan Statistical Areas (MSAs). TIGER files contain the name and location of every street in the country and detailed block statistics for the 345 largest urban areas. In essence, TIGER is a massive database of geographic features such as roads, railways, and political boundaries across the entire United States that, when linked with mapping programs and demographic databases, gives entrepreneurs incredible power to pinpoint existing and potential customers on easy-to-read digital maps.

The Small Business Administration's Small Business Development Center (SBDC) program also offers location analysis assistance to entrepreneurs. These centers, numbering more than 1,000 nationwide, provide training, counseling, research, and other specialized assistance to entrepreneurs and existing business owners on a wide variety of subjects—all at no charge! They are an important resource, especially for those entrepreneurs who may not have access to a computer. (To locate the SBA nearest you, contact the SBA office in your state or go to the SBA's home page at www.sba.gov/SBDC).

Once an entrepreneur has identified the best region of the country, the next step is to evaluate the individual states in that region.

Choosing the State

Every state has an economic development office to recruit new businesses to that state. Even though the publications produced by these offices will be biased in favor of locating in that state, they still are an excellent source of facts and can help entrepreneurs assess the business climate in each state. Some of the key issues to explore include the laws, regulations, and taxes that govern businesses and any incentives or investment credits the state may offer to businesses locating there. Other factors to consider include proximity to markets, proximity to raw materials, wage rates, quantity and quality of the labor supply, general business climate, tax rates, and Internet access.

PROXIMITY TO MARKETS. Locating close to markets they plan to serve is extremely critical to manufacturers, especially when the cost of transportation of finished goods is high relative to their value. Locating near customers is necessary to remain competitive. Service firms often find that proximity to their clients is essential. If a business is involved in repairing equipment used in a specific industry, it should be located where that industry is concentrated. The more specialized a business, or the greater the relative cost of transporting the product to the customer, the more likely it is that proximity to the market will be of critical importance in the location decision. For instance, with its location in the center of the country and its ready access to a variety of transportation systems, St. Louis, Missouri, has become home to many companies' distribution centers. Not only do businesses in St. Louis benefit from a well-educated workforce, but they also can ship to customers anywhere in the country quickly and efficiently.

PROXIMITY TO NEEDED RAW MATERIALS. If a business requires raw materials that are difficult or expensive to transport, it may need a location near the source of those raw materials. For instance, one producer of kitty litter chose a location on a major vein of kaolin, the highly absorbent clay from which kitty litter is made. Transporting the heavy, low-value material over long distances would impractical—and unprofitable. In other situations in which bulk or weight is not a factor, locating manufacturing in close proximity to the suppliers can facilitate quick deliveries and reduce holding costs for inventories. The value of products and materials, their cost of transportation, and their unique function all interact in determining how close a business needs to be to its source of supplies.

WAGE RATES. Existing and anticipated wage rates will provide another measure for comparison among states. Wages can sometimes vary from one state or region to another, significantly affecting a company's cost of doing business. For instance, according to the Bureau of Labor Statistics, the average hourly compensation for workers (including wages and benefits) ranges from a low of $19.77 in the South to a high of $25.36 in the Northeast.[4] Wage rate differentials within geographic regions can be even more drastic. When reviewing wage rates, entrepreneurs must be sure to measure the wage rates for jobs that relate to their particular industries or companies. In addition to government surveys, local newspaper ads can give entrepreneurs an idea of the pay scale in an area. Additionally, an e-mail or telephone call to the local Chambers of Commerce for cities in the region being considered will generally result in obtaining the latest wage and salary surveys that are normally conducted annually. Entrepreneurs should study not only prevailing wage rates but also *trends* in rates. How does the rate of increase in wage rates compare to those in other states? Another factor influencing wage rates is the level of union activity in a state. How much union organizing activity has the state seen within the past two years? Is it increasing or decreasing? Which industries have unions targeted in the recent past?

LABOR SUPPLY NEEDS. For many businesses, especially those that would be chartered as technology-driven companies, one of the most important characteristics of a potential location is the composition of the local workforce. Entrepreneurs must consider two factors when analyzing the labor supply in a potential location: the number of workers available in the area and their levels of education, training, adaptability, and experience.

A Company Example

When Gateway founder Ted Waite realized that attracting top managers and staying on top of the dynamic computer industry was difficult to do from the company's South Dakota location, he moved the administrative hub to San Diego, California, a hotbed of skilled workers and high-tech activity. Since moving Gateway's headquarters, Waite has filled nearly all of the top management posts with local talent. "It really came down to this being a great place to recruit people, with a quality of life [that is] unmatched," says Waite.[5]

Of course, an entrepreneur wants to know how many qualified people are available in the area to do the work required in the business. However, unemployment and labor cost statistics can be misleading if a company needs people with specific qualifications. Some states have attempted to attract industry with the promise of cheap labor. Unfortunately, businesses locating there found exactly what the term implied—unskilled, low-wage labor ill-suited for performing the work the companies needed.

Knowing the exact nature of the labor needed and preparing job descriptions and job specifications in advance will help a business owner determine whether there is a good match with the available labor pool. Reviewing the major industries already operating in an area will provide clues about the characteristics of the local workforce as well. Checking with the high schools, colleges, and universities in the state to determine the number of graduates in relevant fields of study will provide an idea of the local supply of qualified workers. Again, as with wage and salary data, Chambers of Commerce and economic development agencies in the locations under study are almost always willing to go that extra mile to get you the information you need regarding the availability of employees with specific skills, knowledge, or training. Such planning will result in choosing a location with a steady source of quality labor.

BUSINESS CLIMATE. What is the state's overall attitude toward your kind of business? Has it passed laws that impose restrictions on the way a company can operate? Does the state impose a corporate income tax? Is there an inventory tax? Are there "blue laws" that prohibit certain business activity on Sundays? Does the state offer small business support programs or financial assistance to entrepreneurs? These are just some of the issues an owner must compare on a state-by-state basis to determine the most suitable location.

Some states are more "small business friendly" than others. For instance, *Entrepreneur* magazine recently named Fort Worth/Arlington, Texas, as one of the best areas for small businesses, citing its positive attitude toward growing and developing small companies as major assets. Many factors make Fort Worth (once known as Cowtown because of its stockyards) a desirable location, including its diversified economic base, a strong core of more than two dozen *Fortune* 500 companies, significant population of private investors anxious to invest in promising small companies, and several state and local government support systems offering entrepreneurial assistance and advice. The renaissance of the downtown business district is creating new opportunities for small businesses, and both the Dallas–Fort Worth International Airport and Alliance Airport (a specialized commercial air facility) provide important pieces of business infrastructure.[6]

TAX RATES. Another important factor entrepreneurs must consider when screening states for potential locations is the tax burden they impose on businesses and individuals. Income taxes may be the most obvious tax states impose on both business and individual residents, but entrepreneurs also must evaluate the impact of payroll taxes, sales taxes, property taxes, and specialized taxes on the cost of their operations. Currently, seven states impose no income tax on their residents, but state governments always impose taxes of some sort on businesses and individuals. In some cases, states offer special tax rates or are willing to negotiate fees in lieu of taxes for companies that will create jobs and stimulate the local economy.

INTERNET ACCESS. Speedy and reliable Internet access is an increasingly important factor in the location decision. Fast Internet access through cable, DSL, or T1 lines is essential for high-tech companies and those engaging in e-commerce. Even those companies that may not do business over the Web currently are finding it nearly certain that they will use the Web as a business tool. Companies that fall behind in high-tech communication will find themselves at a severe competitive disadvantage.

A Company Example

*When **Darryl Lyons**, a third-generation rancher, began raising Angus cattle to sell from his ranch in Okmulgee, Oklahoma, he made all of his first-year sales of $140,000 to customers located within a 100-mile radius. Then Lyons began using the Web as a marketing tool, and sales climbed to $600,000. Now reaching customers across the globe, Lyons expects sales to reach more than $1.5 million! One problem Lyons faces in his remote location, however, is fast, reliable Internet service. Bad weather interrupts his telephone and Internet service about a dozen times a year, costing him an estimated $3,000 to $4,000 in lost sales each day it is out.*[7]

Most entrepreneurs are amazed at the amount of helpful information that exists about each state if they search the right places and ask the right questions. When entrepreneurs ask questions about the feasibility of opening a new business in any state, they most often find professional staffers whose job it is to provide the requested information in a timely fashion. Their job is to help you locate your business in their state. Obtaining and analyzing the information about a region and the states in it provide entrepreneurs with a clear picture of the most favorable location. The next phase of the location selection process concentrates on selecting the best city.

Choosing the City

POPULATION TRENDS. Entrepreneurs should know more about the cities in which their businesses are located than do the people who live there. By analyzing population and other demographic data, an entrepreneur can examine a city in detail, and the location decision becomes more than a shot in the dark. Studying the characteristics of a city's residents, including population size and density, growth trends, family size, age breakdowns, education, income levels, job categories, gender, religion, race, and nationality gives an entrepreneur the facts she needs to make an informed location decision. In fact, using only basic census data, entrepreneurs can determine the value of the homes in an area, how many rooms they contain, how many bedrooms they contain, what percentage of the population own their homes, and how much residents' monthly rental or mortgage payments are. Imagine how useful such information would be to someone about to launch a bed and bath shop!

A company's location should match the market for its products or services, and assembling a demographic profile will tell an entrepreneur how well a particular site measures up to her target market's profile. For instance, an entrepreneur planning to open a fine china shop would likely want specific information on family income, size, age, and education. Such a shop would need to be in an area where people appreciate the product and have the discretionary income to purchase it.

Trends or shifts in population components may have more meaning than total population trends. For example, if a city's population is aging rapidly, its disposable income may be decreasing and the city may be gradually dying. On the other hand, a city may be experiencing rapid growth in the population of high-income, young professionals. For example, because it has one of the best telecommunications infrastructures in the world and offers low cost of doing business and ready access to venture capital, Atlanta, Georgia, is attracting droves of young people, many of them entrepreneurs. As a result, the city, where the median age of inhabitants is 30, has seen an explosion of new businesses aimed at young people with rising incomes and hearty appetites for consumption.

Entrepreneurs can gain a great deal of insight about potential locations via the Internet. Countries, states, and even cities have official and unofficial Web sites whose primary objective is to sell potential business owners on the benefits of their location.

A Company Example

Examples of this include groups such as the ***Downtown Denver Partnership, Inc.*** *(www.downtowndenver.com), which is a nonprofit business organization that represents businesses, commercial property owners, and employees of firms that are located in, of course, downtown Denver, Colorado. In this role, they maintain extensive databases and information on the downtown Denver business market, including detailed maps, demographics, market data, transportation studies, and other relevant trends that influence business in downtown Denver. A review of the data that this nonprofit offers allow a fast but thorough overview of the business complexion of the area, as well as facts and figures on the location (see Figure 13.1).*

The amount of available data on the population of any city or town is staggering. These statistics allow a potential business owner to compare a wide variety of cities or towns and to narrow the choices to those few that warrant further investigation. The mass of data may make it possible to screen out undesirable locations, but it does not make a decision for an entrepreneur. Still, entrepreneurs need to see potential locations firsthand. Only by personal investigation will

FIGURE 13.1

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downtown DENVER

BUSINESS LOCATION

- Denver ranked as the third most popular US city for businesses to relocate in 2002, according to the Rand Corporation. The criteria for the ranking includes costs, labor, quality of life and the economy.
- Denver is ranked 7th in the U.S. for Internet access, with 70% of the population having access.
- Downtown represents the region's most dense and most diverse business center. Additionally, as the central hub of roads, transit systems and trails, Downtown is easily accessible for all metro residents.

Office Market Facts

Total Square Feet:	25,083,733
Total Square Feet Under Construction:	290,000
Total Square Feet Proposed:	1,575,000
Number of Buildings:	144
Number of Buildings over 100,000 s.f.:	53
Average Class A Lease Rate:	$21.05/s.f.
Total Vacancy Rate:	18.5%
Absorption:	119,519 s.f.
	(1st Qtr 2003)

Source: Cushman & Wakefield

Infrastructure

- Downtown is the hub of the regional transportation system, easily accessible from all directions in the seven-county metro area.
- Forty-five percent of Downtown workers utilize some form of alternative transportation.
- The 14-mile light rail system runs directly through Downtown and carries more than 33,000 passengers daily.
- More than 65 buses per hour arrive in Downtown during peak hours, anchored by the 16th Street Mall Free Shuttle.
- Downtown has five power substations, with three underground power sources.
- Most Downtown buildings offer unlimited fiber optic Internet access.
- Denver is the most efficient site for fiber optics transmission in North America.

- Denver has established a district cooling system that eliminates the need in most buildings for individual mechanical systems and lowers energy cost by reducing peak-demand power usage.
- Denver is a four hour plane ride away from any U.S. city with more than one million people.
- The Denver International Airport is the fifth busiest airport in the U.S. with direct flights serving 110 U.S. cities and 13 international locations.

Investment Projections 2002–2003

Area	Rents – Anticipated Growth Rates	For Sale – Anticipated Growth Rates	Investment Rating – 1 = poor 10 = excellent
CBD Office	**2.8%**	**3.0%**	**5.5**
Suburban Office	1.5%	1.8%	4.5
Neighborhood/ Communities	2.5%	2.5%	4.8
Apartments	2.5%	3.5%	5.5
Hotels	.8%	1.6%	3.4
Denver Average	2.0%	2.4%	4.6

Source: RERC Investment Survey

2003 Tax Rates

Denver ranks third lowest for combined total business taxes, according to a Vertex tax study of 27 cities.

Corporate Income Tax:	4.63% (state)
Sales Tax:	7.2%
Food/Beverage/Liquor:	7.7%
Car Rental:	10.95%
Lodger's Tax:	10.95%
Telecommunications Tax:	$1.12/month per account

Occupational Privilege Tax: $9.75 per month per employee ($5.75 employee, $4.00 employer)

Property Tax: Taxes on a 25,000 s.f. office building valued at $71 per s.f. come to $35,460, placing Denver's mill rate among the lowest nationwide.

Compiled by the Downtown Denver Partnership (4/03)

DOWNTOWN DENVER PARTNERSHIP, INC.

an entrepreneur be able to add that intangible factor of intuition into the decision-making process. Spending time at a potential location will tell an entrepreneur not only how many people frequent it but also what they are like, how long they stay, and what they buy. Walking or driving around the area will give an entrepreneur clues about the people who live and work there. What are their houses like? What kinds of cars do they drive? What stage of life are they in? Do they have children? Is the area on the rise or is it past its prime?

When evaluating cities as possible business locations, entrepreneurs should consider the following factors:

COMPETITION. For some retailers, it makes sense to locate near competitors because similar businesses located near one another may serve to increase traffic flow to both. This location strategy works well for products for which customers are most likely to comparison shop. For instance, in many cities, auto dealers locate next to one another in a "motor mile," trying to create a shopping magnet for customers. The convenience of being able to shop for dozens of brands of cars all within a few hundred yards of one another draws customers from a sizable trading area. Of course, this strategy has limits. Overcrowding of businesses of the same type in an area can create an undesirable impact on the profitability of all competing firms. Consider the nature of the businesses in the area. Do they offer the same-quality merchandise or comparable services? The products or services of a business may be superior to those that competitors currently offer, giving it a competitive edge.

Studying the size of the market for a product or service and the number of existing competitors will help an entrepreneur determine whether she can capture a sufficiently large market share to earn a profit. Again, census reports can be a valuable source of information. *County Business Patterns* shows the breakdown of businesses in manufacturing, wholesale, retail, and service categories and estimates companies' annual payrolls and number of employees broken down by county. *Zip Code Business Patterns* provides the same data as *County Business Patterns* except it organizes the data by zip code. The *Economic Census*, which is produced for years that end in "2" and "7," gives an overview of the businesses in an area—their sales (or other measure of output), employment, payroll, and form of organization. It covers eight industry categories—including retail, wholesale, service, manufacturing, construction, and others—and gives statistics at not only the national level but also by state, MSA, county, places with 2,500+ inhabitants, and zip code. The *Economic Census* is a useful tool for helping entrepreneurs determine whether an area they are considering as a location is already saturated with competitors.

CLUSTERING. Some cities have characteristics that attract certain industries, and, as a result, companies tend to cluster there. With its highly trained, well-educated, and technologically literate workforce, Austin, Texas, has become a mecca for high-tech companies. Home to Dell Computer and Hewlett-Packard, Austin offers computer hardware and software companies exactly what they need to succeed.

Once a concentration of companies takes root in a city, other businesses in those industries tend to spring up there as well. For instance, New York has long been the center of the advertising, fashion, finance, and publishing industries.

A Company Example

Carol Fitzgerald, owner of ***The Book Report Network****, an online provider of book reviews and other services, knew that her company had to be located in New York City because that is where all of the major book publishers' headquarters are located. "We're in publishing," says Fitzgerald. "We have to have an office in the city to get books quickly from the publishers."*[8]

COMPATIBILITY WITH THE COMMUNITY. One of the intangibles that can be determined only by a visit to an area is the degree of compatibility a business has with the surrounding community. In other words, a company's image must fit in with the character of a town and the needs and wants of its residents. For example, Beverly Hills' ritzy Rodeo Drive or Palm Beach's Worth Avenue are home to shops that match the characteristics of the area's wealthy residents. Shops such as Cartier, Tiffany & Company, and Neiman Marcus as well as exclusive designer clothing stores, abound to cater to the area's rich and famous residents.

LOCAL LAWS AND REGULATIONS. Before settling on a city, an entrepreneur must consider the regulatory burden local government might impose. Government regulations affect many aspects of a small business's operation, from acquiring business licenses and building permits to erecting business signs and dumping trash. Some cities are regulatory activists, creating so many rules that they discourage business creation; others take a more lasseiz-faire approach, imposing few restrictions on businesses.

A Company Example

*Managers at **Scanivalve Company**, a maker of air pressure measurement equipment, decided that the regulatory environment in San Diego was too oppressive for the company to operate efficiently. Managers complained about convoluted fire inspections and redundant hazardous materials handling inspections, and they decided to move their business when the Traffic Demand Management Agency threatened to impose $96,000 in annual fines on Scanivalve for workers who failed to carpool to work. The company moved to Spokane, Washington, lured by its favorable tax structure, well-educated labor force, good transportation infrastructure, and, of course, reasonable regulatory environment.*[9]

zoning—*a system that divides a city or county into small cells or districts to control the use of land, buildings, and sites.*

variance—*a special exception to a zoning ordinance.*

Zoning laws can have a major impact on an entrepreneur's location decision. **Zoning** is a system that divides a city or county into small cells or districts to control the use of land, buildings, and sites. Its purpose is to contain similar activities in suitable locations. For instance, one section of a city may be zoned residential, whereas the primary retail district is zoned commercial and another is zoned industrial to house manufacturing operations. Before selecting a particular site within a city, an entrepreneur must explore local zoning laws to determine if there are any ordinances that would place restrictions on business activity or that would prohibit establishing a business altogether. Zoning regulations may make a particular location "out of bounds." In some cases, an entrepreneur may appeal to the local zoning commission to rezone a site or to grant a **variance** (a special exception to a zoning ordinance), but this is risky and could be devastating if the board denies the variance.

TRANSPORTATION NETWORKS. Business owners must investigate the quality of local transportation systems. Is an airport located nearby? Are flights available to the necessary cities and are the schedules convenient? If a company needs access to a railroad spur, is one available in the city? How convenient is the area's access to major highways? What about travel distances to major customers? How long will it take to deliver shipments to them? Are the transportation rates reasonable? Where is the nearest seaport? In some situations, double or triple handling of merchandise and inventory causes transportation costs to skyrocket. For retailers, the availability of loading and unloading zones is an important feature of a suitable location. Some downtown locations suffer from a lack of sufficient space for carriers to unload deliveries of merchandise.

POLICE AND FIRE PROTECTION. Does the community in which you plan to locate offer adequate police and fire protection? If these services are not adequate and crime rates are high, the cost of the company's business insurance will reflect that.

COST OF UTILITIES AND PUBLIC SERVICES. A location should be served by a governmental unit that provides water and sewer services, trash and garbage collection, and other necessary utilities at a reasonable cost. The streets should be in good repair with adequate drainage. If the location is not within the jurisdiction of a municipality that provides these services, they will become a continuing cost to the business.

QUALITY OF LIFE. A final consideration when selecting a city is the quality of life it offers. For many entrepreneurs, quality of life is one of the key determinants of their choice of locale. Cities that offer comfortable weather, cultural events, museums, outdoor activities, concerts, restaurants, and an interesting nightlife have become magnets for entrepreneurs looking to start companies. Not only can a location in a city offering a high quality of life be attractive to an entrepreneur, but it can also make recruiting employees much easier.

A Company Example

*Matthew Burkley, CEO of **Zefer Corporation**, an Internet consulting firm, chose to locate his company's headquarters in an area in downtown Boston where high-tech companies are concentrated. As Zefer established offices across the country, managers chose locations where they could attract the most qualified workers—San Francisco's South of Market, Chicago's Bucktown, and lower Manhattan. Burkley discovered that the workers the company wants most are young people who want to live and work in neighborhoods filled with people like them and offering the shops, clubs, galleries, and restaurants they enjoy. "In today's labor market, you have to be where your team members want to be," says Burkley.*[10]

Choosing the Site

The final step in the location selection process is choosing the actual site for the business. Again, facts will guide an entrepreneur to the best location decision. Each type of business has different evaluation criteria for what makes an ideal location. A manufacturer's prime consideration may be access to raw materials, suppliers, labor, transportation, and customers. Service firms need access to customers but can generally survive in lower-rent properties. A retailer's prime consideration is sufficient customer traffic. The one element common to all three is the need to locate where customers want to do business.

The site location decision draws on the most precise information available on the makeup of the area. Through the use of the published statistics mentioned earlier in this chapter, an entrepreneur can develop valuable insights regarding the characteristics of people and businesses in the immediate community.

Would you like to know how many people or families are living in your trading area, what types of jobs they have, how much money they make, their ages, the value of their homes, and their education level, as well as a variety of other useful information? Sometimes businesses pay large fees to firms and consultants for this market research information. However, this information is available free from public libraries and on the Web. Every decade, the U.S. government undertakes one of the most ambitious market research projects in the world, collecting incredibility detailed statistics on the nation's 285 million residents and compiling it into easy-to-read reports! The Census Bureau has divided the United States into 255 Metropolitan Statistical Areas (MSAs). These MSAs are then subdivided into census tracts, which contain an average of 4,000 to 5,000 people. These census tracts are subdivided into block statistics and are extremely useful for entrepreneurs considering sites in urban areas.

This mother lode of market research is available to entrepreneurs through some 1,300 state data centers across the country. Two reports entrepreneurs find especially useful when choosing locations are *Summary Population*, which provides a broad demographic look at an area, and *Housing Characteristics*, which offers a detailed breakdown of areas as small as city blocks. Nationally, the average block contains about 100 people. The data are available both on CD-ROM and on the World Wide Web at the Census Bureau's Web site. Any entrepreneur with a PC can access this incredible wealth of data with just a few clicks of a mouse.

LOCATION CRITERIA FOR RETAIL AND SERVICE BUSINESSES

2. Describe the location criteria for retail and service businesses.

Few decisions are as important for retailers and service firms as the choice of a location. Because their success depends on a steady flow of customers, these businesses choose a location with their target customers' convenience and preferences in mind. The following are important considerations:

Trade Area Size

trading area—*the region from which a business can expect to draw customers over a reasonable time span.*

Every retail and service business should determine the extent of its **trading area**, the region from which a business can expect to draw customers over a reasonable time span. The primary variables that influence the scope of the trading area are the type and the size of the business. If a retail store specializes in a particular product line offering a wide selection and knowledgeable salespeople, it may draw customers from a great distance. In contrast, a convenience store with a general line of merchandise may have a small trading area, because it is unlikely that customers would drive across town to purchase what is available within blocks of their homes or businesses. As a rule, the larger the store, the greater its selection, and the better its service, the broader is its trading area.

A Company Example

For example, the typical movie theater draws its customers from an area of five to seven miles; however, the ***AMC Grand****, a collection of 24 screens under one roof in Dallas, Texas, draws customers from as far as 25 miles away. This freestanding "megaplex" has expanded the normal theater trading area and attracts an amazing 3 million moviegoers a year even though it is not located near a shopping mall, as most theaters are. AMC Grand's attendance per screen averages 38 percent more than do AMC Entertainment's traditional theaters. Its revenue per customer is 10 percent higher, and its profit margins are 12.5 percent higher.*[11]

The following environmental factors also influence trading area size:

Retail Compatibility

retail compatibility—*the benefits a company receives by locating near other businesses selling complementary products and services.*

Shoppers tend to be drawn to clusters of related businesses. That's one reason shopping malls and outlet shopping centers are popular destinations for shoppers and are attractive locations for retailers. The concentration of businesses pulls customers from a larger trading area than a single freestanding business does. **Retail compatibility** describes the benefits a company receives by locating near other businesses selling complementary products and services. Clever business owners choose their locations with an eye on the surrounding mix of businesses.

A Company Example

Selecting a site in which complementary businesses are located has helped Scott Fiore draw customers to his natural pharmacy, The Herbal Remedy.

Courtesy of The Herbal Remedy.

Once Scott Fiore decided that Littleton, Colorado, was the ideal city in which to locate his natural pharmacy, ***The Herbal Remedy****, he began a more detailed site analysis that led him to South Bridge Shopping Plaza. This strip shopping center proved to be the ideal location for The Herbal Remedy because of its ready access from a local interstate highway and the complementary nature of the surrounding businesses. A massage therapist, a health club, a chiropractor, a rehabilitation center, and a gourmet meat market in the shopping center attract the same customers that Fiore targets. Plus, the Littleton Hospital is directly across the street. "It really is perfect," says Fiore. "We're getting referrals from all those places."*[12]

Degree of Competition

The size, location, and activity of competing businesses also influence the size of a company's trading area. If a business will be the first of its kind in a location, its trading area might be quite extensive. However, if the area already has eight or ten nearby stores that directly compete with a business, its trading area might be very small because the market is saturated with competitors. Market saturation is a problem for businesses in many industries, ranging from fast-food restaurants to convenience stores. A study by the *Convenience Store News*, a trade publication of the convenience store industry, found that if the number of customers per convenience store in an area dropped below 3,000, the stores in that area suffered, and many were forced to close.[13]

The Index of Retail Saturation

index of retail saturation—*a measure of the potential sales per square foot of store space for a given product within a specific trading area; it is the ratio of a trading area's sales potential for a product or service to its sales capacity.*

One of the best ways to measure the level of saturation in an area is the index of retail saturation (IRS), which evaluates both the number of customers and the intensity of competition in a trading area.[14] The **index of retail saturation** is a measure of the potential sales per square foot of store space for a given product within a specific trading area. The index is the ratio of a trading area's sales potential for a particular product or service to its sales capacity:

$$IRS = \frac{C \times RE}{RF}$$

where

C = number of customers in the trading area

RE = retail expenditures, or the average expenditure per person (\$) for the product in the trading area

RF = retail facilities, or the total square feet of selling space allocated to the product in the trading area

This computation is an important one for every retailer to make. Locating in an area already saturated with competitors results in dismal sales volume and often leads to failure.

To illustrate the index of retail saturation, suppose that an entrepreneur looking at two sites for a shoe store finds that he needs sales of \$175 per square foot to be profitable. Site 1 has a trading area with 25,875 potential customers who spend an average of \$42 on shoes annually; the only competitor in the trading area has 6,000 square feet of selling space. Site 2 has 27,750 potential customers spending an average of $43.50 on shoes annually; two competitors occupy 8,400 square feet of space.

Site 1

$$\text{IRS} = \frac{25{,}875 \times 42}{6{,}000}$$

$$= \$181.12 \text{ sales potential per square foot}$$

Site 2

$$\text{IRS} = \frac{27{,}750 \times 43.50}{8{,}400}$$

$$= \$143.71 \text{ sales potential per square foot}$$

Although Site 2 appears to be more favorable on the surface, the index shows that Site 1 is preferable; Site 2 fails to meet the minimum standard of sales of $175 per square foot.

Transportation Network

The transportation networks are the highways, roads, and public service routes that presently exist or are planned. If customers find it inconvenient to get to a location, the store's trading area is reduced. Entrepreneurs should check to see if the transportation system works smoothly and is free of barriers that might prevent customers from reaching their stores. Is it easy for customers traveling in the opposite direction to cross traffic? Do signs and traffic lights allow traffic to flow smoothly? When traffic flow is absolutely critical to the success of a business venture, make an extra effort to contact city government officials who are knowledgeable about transportation plans. Ask about future road construction projects that may be planned or seriously under consideration. Such road construction could be either beneficial or disastrous.

Physical, Racial, or Emotional Barriers

Trading area shape and size also are influenced by physical, racial, or political barriers that may exist. Physical barriers may be parks, rivers, lakes, or any other natural or artificial obstruction that hinders customers' access to the area. Locating on one side of a large park may reduce the number of customers that will drive around it to get to the store. If high-crime areas exist in any direction from the site, most of a company's potential customers will not travel through those neighborhoods to reach the business.

In urban areas, new immigrants tend to cluster together, sharing a common culture and language. Some areas are defined by cultural barriers, where inhabitants patronize only the businesses in their neighborhoods. The "Little Havana" section of Miami or the "Chinatown" sections of San Francisco, New York, and Los Angeles are examples.

One of the most powerful emotional barriers affecting a location is fear. Businesses in areas where crime is a problem suffer because customers are not willing to travel into them. In south central Los Angeles, an area once decimated by riots, only a handful of businesses have reopened to serve the local population. Business owners, afraid that the area's burned out buildings and reputation for crime will dissuade customers from patronizing their businesses, have chosen locations in other parts of the city.

Political Barriers

Political barriers are creations of law. County, city, or state boundaries—and the laws within those boundaries—are examples. State tax laws sometimes create conditions where customers cross over to the next state to save money. For instance, North Carolina imposes a very low cigarette tax, and shops located near the state line do a brisk business in the product selling to customers from bordering states.

Other factors retailers should consider when evaluating potential sites include:

Customer Traffic

Perhaps the most important screening criteria for a potential retail (and often for a service) location is the number of potential customers passing by the site during business hours. To be successful, a business must be able to generate sufficient sales to surpass its break-even point, and that requires an ample volume of customer traffic going past its doors. The key success factor for a convenience store is a high-volume location with easy accessibility. Entrepreneurs should know the traffic counts (pedestrian and/or auto) and traffic patterns at the sites they are considering as potential locations.

Adequate Parking

If customers cannot find convenient and safe parking, they are not likely to stop in the area. Many downtown areas have lost customers because of inadequate parking. Although shopping malls average five parking spaces per 1,000 square feet of shopping space, many central business districts get by with 3.5 spaces per 1,000 square feet. Customers generally will not pay to park if parking is free at shopping centers or in front of competitive stores. Even when free parking is provided, some potential customers may not feel safe on the streets, especially after dark. Many large city downtown business districts become virtual ghost towns at the end of the business day. A location where traffic vanishes after 6 P.M. may not be as valuable as mall and shopping center locations that mark the beginning of the prime sales time at 6 P.M.

Reputation

Like people, a site can have a bad reputation. In some cases the reputation of the previous business will lower the value of the location. Sites where businesses have failed repeatedly create negative impressions in customers' minds; people view the business as just another that soon will be gone. One restaurateur struggled early on to overcome the negative image his location had acquired over the years as one restaurant after another had failed there. He eventually established a base of loyal customers and succeeded, but it was a slow and trying process.

Room for Expansion

A location should be flexible enough to provide for expansion if success warrants it. Failure to consider this factor can result in a successful business being forced to open a second store when it would have been better to expand in its original location.

Planning for expansion is always a difficult issue with very real cost considerations. If the business is a success and expansion is warranted, does this location allow the facility to expand? Is the location under consideration able to be expanded or is it bounded by other businesses? Beginning with "extra" space for future expansion is very expensive. The business is incurring cost that may place an undue burden on profits. The issue of expansion always includes a dilemma. Having the needed space when growth occurs may mean that the business can stay at the same location. This allows the entrepreneur to avoid the cost and customer confusion created by moving the business to a new location versus the up-front costs of having a location that is intentionally larger than is needed.

Visibility

No matter what a small business sells and how well it serves customers' needs, it cannot survive without visibility. Highly visible locations simply make it easy for customers to make purchases. A site lacking visibility puts a company at a major disadvantage before it ever opens its doors for business.

LOCATION OPTIONS FOR RETAIL AND SERVICE BUSINESSES

Learning Objective

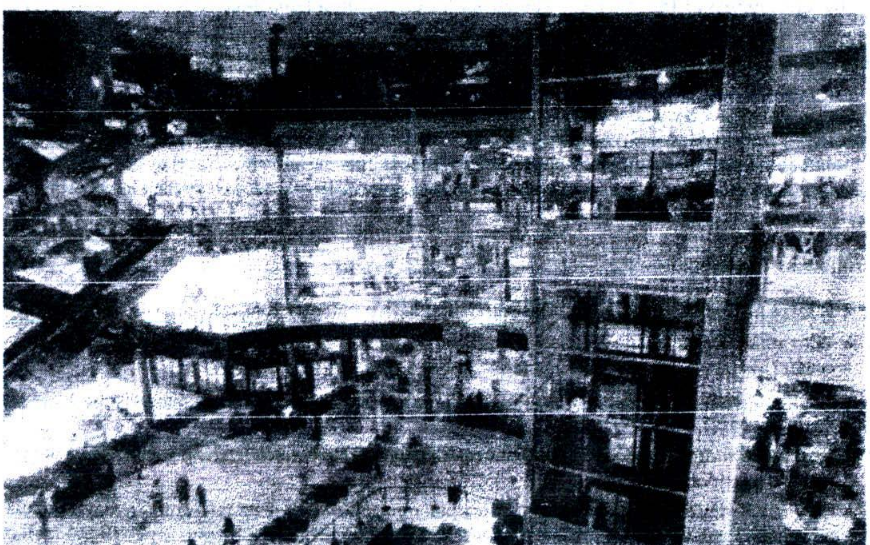
3. Outline the location options for retail and service businesses.

There are six basic areas where retail and service business owners can locate: the central business district (CBD), neighborhoods, shopping centers and malls, near competitors, outlying areas, and at home. According to the International Council of Shopping Centers, the average cost to lease space in a shopping center is about $15 per square foot. At a regional mall, rental rates run from $20 to $40 per square foot, and in central business locations, the average cost is $43 per square foot (although rental rates can vary significantly in either direction of that average, depending on the city).[15] Of course, cost is just one factor a business owner must consider when choosing a location.

Central Business District

The central business district (CBD) is the traditional center of town—the downtown concentration of businesses established early in the development of most towns and cities. Entrepreneurs derive several advantages from a downtown location. Because the firm is centrally located, it attracts customers from the entire trading area of the city. Also, a small business usually benefits from the customer traffic generated by the other stores in the district. However, locating in a CBD does have certain disadvantages. Many CBDs are characterized by intense competition, high rental rates, traffic congestion, and inadequate parking facilities.

Beginning in the 1950s, many cities saw their older downtown business districts begin to decay as residents moved to the suburbs and began shopping at newer, more convenient malls. Today, however, many of these CBDs are experiencing rebirth as cities restore them to their former splendor and shoppers return. Many customers find irresistible the charming atmosphere that traditional downtown districts offer with their rich mix of stores, their unique architecture and streetscapes, and their historic character. Cities have begun to reverse the urban decay of their downtown business districts through proactive revitalization programs designed to attract visitors and residents alike to cultural events by locating major theaters and museums in the downtown area. In addition, many cities are providing economic incentives to real estate developers to build apartment and condominium complexes in the heart of the downtown area. Vitality is returning as residents live and shop in the once nearly abandoned downtown areas. The "ghost-town" image is being replaced by both younger and older residents who love the convenience and excitement of life at the center of the city. One real estate developer experienced in Main Street locations says that his research shows that the best downtown streets for retailers are located in densely populated, affluent areas, are one-way, offer on-street parking, and are shaded by mature trees.[16]



Shopping malls and centers in the United States account for $1.23 billion in sales a year. The typical customer spends an average of 76.4 minutes and $68.20 per mall visit.

Courtesy of Corbis Bettmann, © Owen Franken/Corbis.

A Company Example

*Working through the **National Main Street Program**, residents in Burlington, Iowa, have revitalized their downtown district. When three historic buildings, including an old stone mill, that had fallen into disrepair were about to be demolished, residents sprang into action and began a cooperative program to refurbish the old buildings and to recruit businesses to them. The effort was successful, and Burlington has since seen 80 new businesses open downtown, representing a total investment of $4.5 million!*[17]

Neighborhood Locations

Small businesses that locate near residential areas rely heavily on the local trading areas for business. Businesses that provide convenience as a major attraction for customers find that locating on a street or road just outside major residential areas provides the needed traffic counts essential for success. Gas stations and convenience stores seem to thrive in these high-traffic areas. One study of food stores found that the majority of the typical grocer's customers live within a five-mile radius. The primary advantages of a neighborhood location include relatively low operating costs and rents and close contact with customers.

Shopping Centers and Malls

The first regional shopping mall, Northgate Shopping Center in Seattle, Washington, was built in 1950 and featured a full-service department store as its anchor and a central pedestrian walkway. Since then, shopping centers and malls have become a mainstay of the American landscape. Since 1970 the number of shopping malls and centers in the United States has climbed from 11,000 to more than 46,300, and they occupy 5.77 billion square feet of retail space.[18] Because many different types of stores exist under one roof, shopping malls give meaning to the term *one-stop shopping*. In a typical month, some 201 million adults visit a mall or shopping center.[19] There are four distinct types of shopping centers:

- *Neighborhood Shopping Centers.* The typical neighborhood shopping center is relatively small, containing from three to 12 stores and serving a population of up to 40,000 people who live within a 10-minute drive. The anchor store in these centers is usually a supermarket or a drugstore.
- *Community Shopping Centers.* The community shopping center contains from 12 to 50 stores and serves a population ranging from 40,000 to 150,000 people. The leading tenant is a department or variety store.
- *Regional Shopping Malls.* The regional shopping mall serves a much larger trading area, usually from 10 to 15 miles or more in all directions. It contains from 50 to 100 stores and serves a population in excess of 150,000 people living within a 20- to 40-minute drive. The anchor is typically one or more major department stores.
- *Power Centers.* A power center combines the drawing strength of a large regional mall with the convenience of a neighborhood shopping center. Anchored by large specialty retailers, these centers target older, wealthier baby boomers, who want selection and convenience. Anchor stores usually account for 80 percent of power center space, compared with 50 percent in the typical strip shopping center. Just as in a shopping mall, small businesses can benefit from the traffic generated by anchor stores, but they must choose their locations carefully so that they are not overshadowed by their larger neighbors.

When evaluating a mall or shopping center location, an entrepreneur should consider the following questions:

- Is there a good fit with other products and brands sold in the mall or center?
- Who are the other tenants? Which stores are the "anchors" that will bring people into the mall or center?
- Demographically, is the center a good fit for your products or services? What are its customer demographics?
- How much foot traffic does the mall or center generate? How much traffic passes the specific site you are considering?
- How much vehicle traffic does the mall or center generate? Check its proximity to major population centers, the volume of tourists it draws, and the volume of drive-by freeway traffic. A mall or center that scores well on all three is probably a winner.
- What is the vacancy rate? The turnover rate?

- How much is the rent and how is it calculated? Most mall tenants pay a base amount of rent plus a percentage of their sales.
- Is the mall or center successful? How many dollars in sales does it generate per square foot? Compare its record against industry averages. The International Council of Shopping Centers in New York (www.icsc.org) is a good source of industry information.

A mall location is no longer a guarantee of success. Malls have been under pressure lately, and many weaker ones have closed. Additionally, the demographic makeup of the shopper often changes over time, creating a new socioeconomic customer base that may or may not be compatible with the customer profile attracted to your business. Others have undergone extensive renovations, adding entertainment features to their existing retail space in an attempt to generate more traffic. The basic problem is an oversupply of malls; the United States has 20 feet of mall retail space for every person in the United States!

Near Competitors

One of the most important factors in choosing a retail or service location is the compatibility of nearby stores with the retail or service customer. For example, stores selling high-priced goods find it advantageous to locate near competitors to facilitate comparison shopping. Locating near competitors might be a key factor for success in those businesses selling goods that customers shop for and compare on the basis of price, quality, color, and other factors.

Although some business owners avoid locations near direct competitors, others see locating near rivals as an advantage. For instance, restaurateurs know that successful restaurants attract other restaurants, which, in turn, attract more customers. Many cities have at least one "restaurant row," where restaurants cluster together; each restaurant feeds customers to the others.

Locating near competitors has its limits, however. Clustering too many businesses of a single type into a small area ultimately will erode their sales once the market reaches the saturation point. When an area becomes saturated with competitors, the shops cannibalize sales from one another, making it difficult for any of them to be successful.

Outlying Areas

Generally, it is not advisable for a small business to locate in a remote area because accessibility and traffic flow are vital to retail and service success, but there are exceptions. Some small firms have turned their remote locations into trademarks. One small gun shop was able to use its extremely remote location to its advantage by incorporating this into its advertising to distinguish itself from its competitors. This location strategy is usually only effective if there are few comparable competitors. There must be an overwhelmingly compelling reason for a potential customer to travel to an outlying area to shop.

An entrepreneur should consider the cost of a location (rental or lease expense) in light of its visibility to potential customers. If a less expensive location is difficult to find and has a low traffic count, the owner will need to spend a disproportionately large amount of money to advertise both where the business is located as well as how to find it. A superior and highly visible location may have a total lower cost when less advertising is needed. Many customers do not want to "go exploring" to find a business and, consequently, never bother to try.

Home-Based Businesses

For more than 24 million people, home is where the business is, and their numbers are swelling. According to the Department of Commerce, home-based businesses represent the fastest-growing segment of the U.S. economy.[20] One recent study found that 52 percent of all small companies are home-based.[21] Although a home-based retail business is usually not feasible, locating a service business at home is quite popular. Many service companies do not have customers come to their places of business, so an expensive office location is unnecessary. For instance, customers typically contact plumbers or exterminators by telephone, and the work is performed in customers' homes.

Entrepreneurs locating their businesses at home reap several benefits. Perhaps the biggest benefit is the low cost of setting up the business. Most often, home-based entrepreneurs set up shop in a spare bedroom or basement, avoiding the cost of renting, leasing, or buying a building. With a few basic pieces of office equipment—a computer, printer, fax machine, copier, telephone answering system, and scanner—a lone entrepreneur can perform just like a major corporation.

A Company Example

For instance, David Gans runs ***Truth and Fun Inc.****, a state-of-the-art production studio, from a spare bedroom in his Oakland, California, home. From his high-tech, in-home studio, Gans produces a weekly radio show, the "Grateful Dead Hour," that he beams by satellite to 90 radio stations across the country. "The equipment has gotten so powerful and inexpensive that one human being working from home can produce the exact same quality program as National Public Radio," says Gans.*[22]

Choosing a home location has certain disadvantages, however. Interruptions are more frequent, the refrigerator is all too handy, work is always just a few steps away, and isolation can be a problem. Another difficulty facing some home-based entrepreneurs involves zoning laws. As their businesses grow and become more successful, entrepreneurs' neighbors often begin to complain about the increased traffic, noise, and disruptions from deliveries, employees, and customers who drive through their residential neighborhoods to conduct business. Many communities now face the challenge of passing updated zoning laws that reflect the reality of today's home-based businesses while protecting the interests of residential homeowners.

Learning Objective

4. Explain the site selection process for manufacturers.

THE LOCATION DECISION FOR MANUFACTURERS

The criteria for the location decision for manufacturers are very different from those of retailers and service businesses; however, the decision can have just as much impact on the company's success. In some cases, a manufacturer has special needs that influence the choice of a location. For instance, when one manufacturer of photographic plates and film was searching for a location for a new plant, it had to limit its search only to those sites with a large supply of available fresh water, a necessary part of its process. In other cases, the location decision is controlled by zoning ordinances. If a manufacturer's process creates offensive odors or excessive noise, it may be even further restricted in its choices.

TABLE 13.1

Rating the Suitability of Sites for a Business

Common Factors	Factor Importance (10 high—1 low)	
Located to serve the customer (demographic trends)		
Cost of the location (rent or purchase price)		
Quantity and quality of the labor supply		
Zoning restrictions		
General business climate		
Transportation		
—For customers (highways, public transportation)		
—For raw material or inventories (rail, barge, air freight)		
Proximity to raw material or inventory		
Quality of public services (fire and police protection)		
Taxes (if owning)		
Adequacy for future expansion		
Value of the site in future years		
Labor cost and anticipated productivity		

Zoning maps show potential manufacturers the areas of the city or county set aside for industrial development. Most cities have developed industrial parks in cooperation with private industry. These industrial parks typically are equipped with sewage and electrical power sufficient for manufacturing. Many locations are not so equipped, and it can be extremely expensive for a small manufacturer to have such utilities brought to an existing site.

The type of transportation facilities required dictates location of a plant in some cases. Some manufacturers may need to locate on a railroad siding, whereas others may only need reliable trucking service. If raw materials are purchased by the carload, for economies of scale, the location must be convenient to a railroad siding. Bulk materials are sometimes shipped by barge and, consequently, require a facility convenient to a navigable river or lake. The added cost of using multiple shipping methods (e.g., rail to truck or barge to truck) can significantly increase shipping costs and make a location unfeasible for a manufacturer.

In some cases the perishibility of the product dictates location. Vegetables and fruits must be canned in close proximity to the fields in which they are harvested. Fish must be processed and canned at the water's edge. Location is determined by quick and easy access to the perishable products.

Table 13.1 provides a rating system to determine the suitability of various locations.

Foreign Trade Zones

Foreign trade zones can be an attractive location for small manufacturers that engage in global trade and are looking to minimize the tariffs they pay on the materials and parts they import and the goods they export. A **foreign trade zone** is a specially designated area in or near a U.S. customs port of entry that allows resident companies to import materials and components from foreign countries; assemble, process, manufacture, or package them; and then ship the finished

foreign trade zone—*a specially designated area in or near a U.S. customs port of entry that allows resident companies to import materials and components from foreign countries; assemble, process, manufacture, or package them; and then ship the finished product while either reducing or eliminating tariffs and duties.*

Actual Scores for Alternative Sites (10 high—1 low)				Total Scores for Alternative Sites (Factor Importance × Actual Score)			
Site A	Site B	Site C	Site D	Site A	Site B	Site C	Site D
			Total	____	____	____	____

Highest-scoring site is: ____________________

product while either reducing or eliminating tariffs and duties. As far as tariffs and duties are concerned, a company located in a foreign trade zone is treated as if it is located outside the United States. For instance, a maker of speakers might import components from around the world and assemble them at its plant located in a foreign trade zone. The company would pay no duties on the components it imports or on the speakers it exports to other foreign markets. The only duties the manufacturer would pay is on the speakers it sells in the United States.

Empowerment Zones

empowerment zone—*an area designated as economically disadvantaged in which businesses are offered tax breaks on the investments they make within zone boundaries.*

Originally created to encourage companies to locate in economically blighted areas, **empowerment zones** offer businesses tax breaks on the investments they make within zone boundaries. Companies can get federal tax credits, grants, and loans for hiring workers living in empowerment zones and for investments they make in plant and equipment in the zones. Empowerment zones operate in both urban and rural areas, ranging from Los Angeles, California, to Sumter, South Carolina. Boston, Massachusetts, has a technology-oriented business incubator located within a federal empowerment zone called TechSpace, which provides high-potential start-up businesses with a full-service facility featuring completely integrated information technology and business services.

Business Incubators

business incubator—*an organization that combines low-cost, flexible rental space with a multitude of support services for its small business residents.*

For many start-up companies, a business incubator may make the ideal initial location. A **business incubator** is an organization that combines low-cost, flexible rental space with a multitude of support services for its small business residents. The overwhelming reason for establishing an incubator is to enhance economic development by attracting new business ventures to an area, as well as to diversify the local economy. An incubator's goal is to nurture young companies during the volatile start-up period and to help them survive until they are strong enough to go out on their own. Common sponsors of incubators include colleges or universities (25 percent), government agencies (16 percent), economic development agencies (16 percent), with the remainder split among partnerships among government, nonprofit agencies and/or private developers and private investment groups. Technology incubators account for 37 percent of all incubators, and 47 percent are mixed-use operations, attracting a wide variety of businesses. The remaining 16 percent focus on service companies and those engaged in light manufacturing or specific niches.[23]

The shared resources incubators typically provide their tenants include secretarial services, a telephone system, computers and software, fax machines, and meeting facilities and, sometimes, management consulting services and financing. Not only do these services save young companies money, but they also save them valuable time. Entrepreneurs can focus on getting their products and services to market faster than competitors rather than searching for the resources they need to build their companies. The typical incubator has entry requirements that prospective residents must meet. Incubators also have criteria that establish the conditions a business must maintain to remain in the facility as well as the expectations for "graduation" into the business community.

More than 950 incubators operate across the United States. Perhaps the greatest advantage of choosing to locate a start-up company in an incubator is a greater chance for success; according to the National Business Incubation Association, graduates from incubators have a success rate of 87 percent. The average incubator houses 20 ongoing businesses employing 55 people.[24]

A Company Example

When the biotech company that he ran from a spare bedroom in his home acquired the exclusive license to a breakthrough system that delivers medicine straight to the heart, James Grabek knew it was time to take his company, ***Comedicus, Inc.****, to the next level. Fearful of losing control of his business, Grabek ultimately turned to Genesis Business Centers, a business incubator in Minneapolis, Minnesota. Harlon T. Jacobs, president of Genesis, offered Grabek access to $50,000 in financing, free office space, and management assistance in exchange for just 5 percent of the company's stock. Grabek decided to nurture his business in the incubator and quickly accepted the offer. Within 15 months, Genesis had helped Comedicus raise $1 million in a private placement and land $4 million in licensing agreements with major pharmaceutical companies. "It was a turning point that catapulted us into the corporate world," Grabek says of his decision to move into the incubator.*[25]

YOU Be the Consultant . . .

The "Cheers" of Bel Air

Downtown Bel Air, Maryland, faces many of the same challenges that thousands of other small towns and large cities across the United States are facing. Located about 40 minutes northeast of Baltimore, Bel Air is in a fast-growing area, but little of that growth is occurring in the town's central business district. The five-and-dime store, the shoe shop, the hardware store, and Richardson's Pharmacy (which boasted an old-fashioned soda fountain) either closed or moved to suburban malls years ago. Most of the buildings in the downtown area are filled with municipal government offices, law firms, accounting firms, and insurance agencies.

Although few merchants remain in downtown locations, Dave Wolff and his wife Jane chose a storefront in the middle of Main Street as the location for their coffee shop, Fine Grind. "We definitely wanted a Main Street location," says Wolff, who rejected the higher-priced sites in several malls near town. He points to the high concentration of white-collar workers in the downtown area who would serve as potential customers for Fine Grind.

Wolff has higher aspirations than mere business success. He wants to be the cornerstone in Bel Air's revitalization effort and to bring "a sense of community" to the town that seems to have lost that. "I'm hoping there's going to be a renaissance on Main Street," he says. "I think I'm the beginning." Wolff was able to supplement the money he invested in the business with a low-interest loan from a state program aimed at revitalizing downtown areas.

Before launching his business, Wolff spent many hours studying the layout, the techniques, and the unique personalities that the proprietors of old-fashioned candy stores, drugstores, and other retail operations used in the early days of the last century. He read books and pored over old photographs and then began applying what he learned to the design of his own shop. He brought in glass canisters of Tootsie Rolls, licorice, jelly beans, and other colorful candies. He bought a large brass espresso machine and put it behind a beautiful long bar hand-crafted from polished wood from an old gymnasium floor. The tables in Fine Grind are made from the same wood.

Not long after opening, people began coming to Bel Air's downtown district just to visit Fine Grind, which is exactly what Wolff wanted to happen. To lure customers in, Wolff allows local artists to display their work on the walls of his shop. One Saturday each month, he stays open later than normal to host an art exhibit with entertainment by a local musician. Although only three people (the artist, the musician, and Wolff) came to the first opening, the events now draw standing-room-only crowds. Wolff also dedicates one evening each month to a local book club (a large bookstore chain in a nearby mall refused to let the book club meet in its store), and another evening the members of a poetry club come in for a poetry reading. During the summer months, Wolff offers live music every Saturday night. Every Saturday morning, Wolf and his family get up early and head to the local farmer's market where they sell coffee and snacks from a booth. Customers also can buy Fine Grind's products from the company's Web site (www.finegrind.net).

Customers have turned Fine Grind into a local hangout, and, like a good bartender, Wolff knows all of his regular customers' favorite drinks. "We call this the 'Cheers' of Bel Air," says Bonnie Maivelett, a regular who comes in with her husband Bob practically every morning, referring to the popular TV show from the 1980s about a Boston pub "where everybody knows your name." Since Fine Grind opened, several other entrepreneurs have opened businesses in the downtown area, including several restaurants, an Irish pub, a T-shirt shop, and others. That's exactly what David Wolff hoped would happen when he launched Fine Grind.

1. What advantages and disadvantages does choosing a downtown location offer an entrepreneur like David Wolff?

2. Assume the role of consultant. Suppose that officials in a town with which you are familiar approached you about revitalizing the central business district. What advice would you offer them?

3. What factors should entrepreneurs evaluate when comparing a downtown location against a location in a shopping center or mall?

Source: Adapted from Hilary Stout, "When Building Up a Business Means Turning Around a Town," *Wall Street Journal*, June 11, 2000, p. B1.

LAYOUT AND DESIGN CONSIDERATIONS

5. Describe the criteria used to analyze the layout and design considerations of a building, including the Americans with Disabilities Act.

Once an entrepreneur chooses the best location for her business, the next question deals with designing the proper layout for the building to maximize sales (retail) or productivity (manufacturing or service). **Layout** is the logical arrangement of the physical facilities in a business that contributes to efficient operations, increased productivity, and higher sales. Planning for the most effective and efficient layout in a business environment can produce dramatic improvements in a company's operating effectiveness and efficiency. An attractive, effective layout can help a company's recruiting efforts. One study conducted by the American

Association of Interior Designers found that employees rated the look and feel of their workspaces as the third most important consideration (after salary and benefits) when deciding whether or not to accept or to quit a job.[26]

A Company Example

In most U.S. businesses you can find the chairperson and CEO by simply searching for the office that is larger than the others with better furniture and the most picturesque view of the outdoors. That process would not help you very much at ***SEI Investments*** *in Oaks, Pennsylvania, a suburb of Philadelphia. Alfred P. West, Jr. doesn't have an office, nor does anyone else. As he puts it, "We don't use personal space to distinguish ourselves." This open work atmosphere encourages employees to be flexible and creative. Actually, that is not an exaggeration because everything is on wheels, which allows employees to move their desks whenever they want. This work climate has earned SEI Investments a place for three years running on Fortune's list of "100 Best Companies to Work For."*[27]

The following factors have a significant impact on a building's layout and design.

Size

layout—*the logical arrangement of the physical facilities in a business that contributes to efficient operations, increased productivity, and higher sales.*

A building must be large enough to accommodate a business's daily operations comfortably. If it is too small at the outset of operations, efficiency will suffer. There must be enough room for customers' movement, inventory, displays, storage, work areas, offices, and restrooms. Haphazard layouts undermine employee productivity and create organizational chaos. Too many small business owners start their operations in locations that are already overcrowded and lack the ability to be expanded. The result is that an owner is forced to make a costly move to a new location within the first few years of operation.

If an entrepreneur plans to expand, will the building accommodate it? Will hiring new employees, purchasing new equipment, expanding production areas, increasing service areas, and other growth require a new location? How fast is the company expected to grow over the next three to five years? Lack of adequate room in the building may become a limitation on a company's growth. Most small businesses wait too long before moving into larger quarters, and they fail to plan their new space arrangements properly. To avoid such problems, some experts recommend that new businesses plan their space requirements one to two years ahead and update the estimates every six months. When preparing the plan, managers should include the expected growth in the number of employees, manufacturing, selling, or storage space requirements and the number and location of branches to be opened.

Construction and External Appearance

Is the construction of the building sound? It pays to have an expert look it over before buying and leasing the property. Beyond the soundness of construction, does the building have an attractive external and internal appearance? The physical appearance of the building provides customers with their first impression of a business. This is especially true in retail businesses. Many retailers provide the customer with a consistent building appearance as they expand (e.g., fast-food restaurants and motels). Is the building's appearance consistent with the entrepreneur's desired image for the business?

Small retailers must recognize the importance of creating the proper image for their stores and how their shops' layouts and physical facilities influence this image. The store's external appearance contributes significantly to establishing its identity in the customer's mind. In many ways the building's appearance sets the tone for what the customer can expect in the way of quality and service. The appearance should, therefore, reflect the business's "personality." Should the building project an exclusive image or an economical one? Is the atmosphere informal and relaxed or formal and businesslike? Physical facilities send important messages to customers. Communicating the right signals through layout and physical facilities is an important step in attracting a steady stream of customers. Retail consultant Paco Underhill advises merchants to "seduce" passersby with their storefronts. "The seduction process should start a minimum of 10 paces away," he says.[28] Mr. Underhill says, "A store's interior architecture is fundamental to the customers experience—the stage upon which a retail company functions."[29]

The following tips will help entrepreneurs create window displays that will sell:

- *Keep displays simple.* Simple, uncluttered, and creative arrangements of merchandise draw the most attention and have the greatest impact on potential customers.
- *Keep displays clean and current.* Dusty, dingy displays or designs that are outdated send a negative message to passersby.
- *Change displays frequently.* Customers do not want to see the same merchandise on display every time they enter a store. Experts recommend changing displays at least quarterly, but stores selling trendy items should change their displays twice a month.
- *Get expert help if necessary.* Not all business owners have a knack for designing window displays. Their best bet is to hire a professional or to work with the design department at a local college or university.

Entrances

All entrances to a business should invite customers in. Wide entry ways and attractive merchandise displays that are set back from the doorway can draw customers into a business. A store's entrance must catch customers' attention and draw them inside. "That's where you want somebody to slam on the brakes and realize they're going someplace new," says retail consultant Paco Underhill.[30] Retailers with heavy traffic flows such as supermarkets or drugstores often install automatic doors to ensure a smooth traffic flow into and out of their stores. Retailers should remove any barriers that interfere with customers' easy access to the storefront. Broken sidewalks, sagging steps, mud puddles, and sticking or heavy doors not only create obstacles that might discourage potential customers, but they also create legal hazards for a business if they cause customers to be injured.

The Americans with Disabilities Act

Americans with Disabilities Act (ADA)—*a law that requires businesses with 15 or more employees to make their facilities available to physically challenged customers and employees.*

The **Americans with Disabilities Act (ADA)**, passed in July 1990, requires practically all businesses to make their facilities available to physically challenged customers and employees. In addition, the law requires businesses with 15 or more employees to accommodate physically challenged candidates in their hiring practices. Most states have similar laws, many of them more stringent than the ADA, that apply to smaller companies as well. The rules of these state laws and the ADA's Title III are designed to ensure that mentally and physically challenged customers have equal access to a firm's goods or services. For instance, the act requires business owners to remove architectural and communication barriers when "readily achievable." The ADA allows flexibility in how a business achieves this equal access, however. For example, a restaurant could either provide menus in braille or could offer to have a staff member read the menu to blind customers. A small dry cleaner might not be able to add a wheelchair ramp to its storefront without incurring significant expense, but the owner could comply with the ADA by offering curbside pickup and delivery services for disabled customers at no extra charge.

Although the law allows a good deal of flexibility in retrofitting existing structures, buildings that were occupied after January 25, 1993, must be designed to comply with all aspects of the law. For example, buildings with three stories or more must have elevators; anywhere the floor level changes by more than one-half inch, an access ramp must be in place. In retail stores, checkouts aisles must be wide enough—at least 36 inches—to accommodate wheelchairs. Restaurants must have 5 percent of their tables accessible to wheelchair-bound patrons.

Complying with the ADA does not necessarily require businesses to spend large amounts of money. The Justice Department estimates that more than 20 percent of the cases customers have filed under Title III involved changes the business owners could have made at no cost, and another 60 percent would have cost less than $1,000![31] In addition, companies with $1 million or less in annual sales or with 30 or fewer full-time employees that invest in making their locations more accessible to all qualify for a tax credit. The credit is 50 percent of their expenses between $250 and $10,500. Businesses that remove physical, structural, and transportation barriers for disabled employees and customers also qualify for a tax deduction of up to $15,000.

The Americans with Disabilities Act also prohibits any kind of employment discrimination against anyone with a physical or mental disability. A physically challenged person is considered to be "qualified" if he can perform the essential functions of the job. The employer must make "reasonable accommodation" for a physically challenged candidate or employee without causing "undue hardship" to the business.

The Americans with Disabilities Act has affected, in a positive way, how businesses deal with this segment of its customers and employees. The Department of Justice offers a program that provides business owners with free information and technical assistance concerning the ADA. The Department of Justice also has an ADA hot line that owners can call for information and publications on the ADA (800-514-0301).

Signs

One of the lowest-cost and most effective methods of communicating with customers is a business sign. Signs tell potential customers what a business does, where it is, and what it is selling. America is a very mobile society, and a well-designed, well-placed sign can be a powerful tool for reaching potential customers.

A sign should be large enough for passersby to read from a distance, taking into consideration the location and speed of surrounding traffic arteries. To be most effective, the message should be short, simple, and clear. A sign should be legible in both daylight and at night; proper illumination is a must. Contrasting colors and simple typefaces are best. The most common problems with business signs are that they are illegible, poorly designed, improperly located, poorly maintained, and have color schemes that are unattractive or are hard to read.

Before investing in a sign, an entrepreneur should investigate the local community's sign ordinance. In some cities and towns, local regulations impose restrictions on the size, location, height, and construction materials used in business signs.

Building Interiors

Like exterior considerations, the functional aspects of building interiors are very important and require careful attention to detail. Designing a functional, efficient interior is not easy. Technology has changed drastically the way employees, customers, and the environment interact with one another.

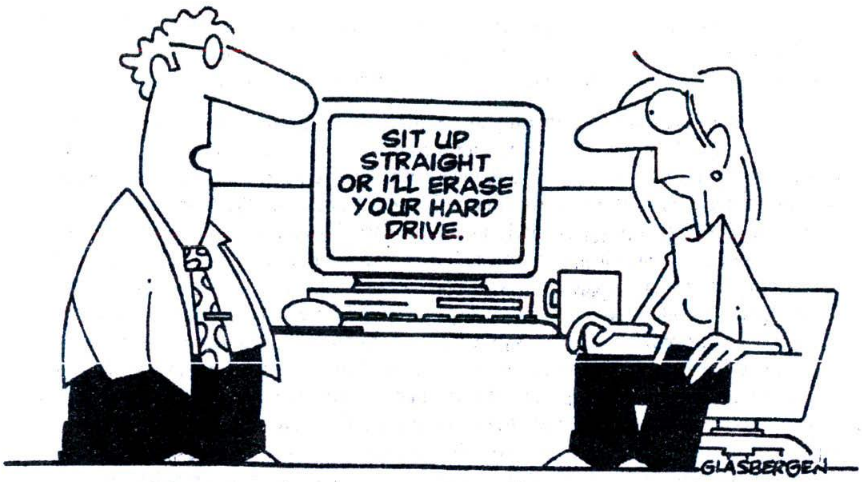
A Company Example

Layout of a store contributes to its ability to achieve its mission. Consider ***Blockbuster****, the world's leading provider of videos, that recently announced the complete redesign of 4,412 company-operated U.S. stores. Its layout goal was to create clearly delineated retail and rental boutique-style sections. The use of new color-blocked signage designed for identification of key sections, as well as other customer-friendly layout changes, were all designed to help Blockbuster "be the complete source to our customers for movies and games, in a format of their choice, rental or retail, new and used."*[32]

ergonomics—*the science of adapting work and the work environment to complement employees' strengths and to suit customers' needs.*

Piecing together an effective layout is not a haphazard process. **Ergonomics**, the science of adapting work and the work environment to complement employees' strengths and to suit customers' needs, is an integral part of a successful design. For example, chairs, desks, and table heights that allow people to work comfortably can help employees perform their jobs faster and more easily. Design experts claim that improved lighting, better acoustics, and proper climate control benefit the company as well as employees. An ergonomically designed workplace can improve workers' productivity significantly and lower days lost due to injuries and accidents. Unfortunately, many businesses fail to incorporate ergonomic design principles into their layouts, and the result is costly. The most frequent and most expensive workplace injuries are musculoskeletal disorders (MSDs), which cost U.S. businesses $20 billion in workers' compensation claims each year. According to the Occupational Safety and Health Administration (OSHA), MSDs account for 34 percent of all lost-work day injuries and illnesses and one-third of all workers' compensation claims.[33] Workers who spend their days staring at computer monitors (a significant and growing proportion of the workforce) often are victims of MSDs.

The most common MSD is carpal tunnel syndrome (CTS), which occurs when repetitive motion causes swelling in the wrist that pinches the nerves in the arm and hand. Studies by the Bureau of Labor Statistics show that more than 42 percent of carpal tunnel syndrome cases require more than 30 days away from work.[34] The good news for employers, however, is that preventing injuries, accidents, and lost days does *not* require spending thousands of dollars on ergonomically correct solutions. Most of the solutions to MSDs are actually quite simple and inexpensive.



"It's called Ergonomics."

Source: REPRINTED BY PERMISSION OF RANDY GLASBERGEN.

A Company Example

__Sequins International__, a maker of sequined fabrics and trimmings in Woodside, New York, uses adjustable chairs and machinery as well as automatic spooling devices to reduce workers' repetitive motions and taxing physical demands. These simple changes eliminated carpal tunnel syndrome and cut workers' compensation costs to just $800, down from $98,000 in just one year.[35]

Other solutions are decidedly low tech.

A Company Example

For instance, when __Designer Checks__, a maker of custom checks based in Anniston, Alabama, consulted with an occupational therapist, owner Grady Burrow learned that one of the best ways to fight MSDs among its computer-dependent workforce is simply to take frequent breaks and to move around. Department heads began scheduling regular exercise breaks designed to stretch employees' necks, shoulders, and hands. Before long, many managers began livening up their exercise breaks with music and dancing! Visitors to Designer Check's plant are likely to see managers and employees take to the production floor for a rousing rendition of the macarena or the hokey pokey.[36]

When planning store, office, or plant layouts, business owners usually focus on minimizing costs. Although staying within a budget is important, minimizing injuries and enhancing employees' productivity with an effective layout should be the overriding issues. Many exhaustive studies have concluded that changes in office design have a direct impact on workers' performance, job satisfaction, and ease of communication. In a reversal of the trend toward open offices separated by nothing more than cubicles, businesses are once again creating private offices in their workspaces. Many businesses embraced open designs, hoping that they would lead to greater interaction among workers. Many companies, however, have discovered that most office workers need privacy and quiet surroundings to be productive. Michael Brill, an office space consultant, studied 11,000 workers to determine the factors that most affect their productivity and found that the ability to do distraction-free work topped the list.[37] Rather than encourage teamwork, open offices leave workers distracted, frustrated, and less productive—just like the characters in the Dilbert cartoon strip.

A Company Example

__Flyswat Inc.__, a company that develops customized tools and services for Internet browsing, designed the interior of its building to appeal to its twenty-something, high-tech workforce. Cofounders John Rodkin, Leo Chang, and Raymond Crouse created a 150-square-foot indoor beach, complete with 3,000 pounds of sand, in their third-floor San Francisco office! Employees can scrunch the sand between their toes while gazing at banana trees, bird of paradise plants, tiki torches, and walls, floors, and ceilings painted to resemble grass and sky. "Why bother?" visitors *ask. Because Flyswat employees often spend 60-plus hours a week there, the company founders want to give them a fun, enjoyable place to work. The company buys dinner for its workers four nights a week, maintains a fully stocked kitchen, and offers showers and a laundry room.*[38]

On a more technical level, when evaluating an existing building's interior, an entrepreneur must be sure to determine the integrity of its structural components. Are the building's floors sufficiently strong to hold the business's equipment, inventories, and personnel? Strength is an especially critical factor for manufacturing firms that use heavy equipment. When multiple floors exist, are the upper floors anchored as solidly as the primary floor? Can inventory be moved safely and easily from one area of the plant to another? Is the floor space adequate for safe and efficient movement of goods and people? Consider the cost of maintaining the floors. Hardwood floors may be extremely attractive but require expensive and time-consuming maintenance. Carpeted floors may be extremely attractive in a retail business but may be totally impractical for a quality manufacturing firm. Entrepreneurs must consider both the utility and durability and maintenance requirements, attractiveness, and, if important, effectiveness in reducing noise.

Like floors, walls and ceilings must be both functional and attractive. On the functional side, walls and ceilings should be fireproof and soundproof. Are the colors of walls and ceilings compatible, and do they create an attractive atmosphere here for customers and employees? For instance, many Web-related companies use bright, bold colors in their designs because they appeal to their young employees. On the other hand, more conservative firms such as accounting firms and law offices decorate with more subtle, subdued tones because they convey an image of trustworthiness and honesty. Upscale restaurants that want their patrons to linger over dinner use deep, luxurious tones and soft lighting to create the proper ambiance. Fast-food restaurants, on the other hand, use strong, vibrant colors and bright lighting to encourage customers to get in and out quickly, ensuring the fast table turnover they require to be successful. In most cases, ceilings should be done in light colors to reflect the store's lighting.

For many businesses, a drive-through window adds another dimension to the concept of customer convenience and is a relatively inexpensive way to increase sales. Although drive-through windows are staples at fast-food restaurants and banks, they can add value for customers in a surprising number of businesses.

A Company Example

For instance, when Marshall Hoffman relocated his business, ***Steel Supply Company****, to a building that had been used as a bank, the idea of using the drive-through window intrigued him. Looking for a way to improve customer service, Hoffman transformed the former bank lobby into his showroom floor and began advertising the convenience of buying steel at the drive-through window. Customers place their steel orders by telephone, pull up to the window and pay, and receive a ticket. The order goes by computer to a warehouse Hoffman built on the site. By the time the customer pulls up to the warehouse, the order is waiting! The window has been a hit with customers. Since moving into its new location, Steel Supply's sales have grown from $3.5 million to more than $6 million.*[39]

Lights and Fixtures

Good lighting allows employees to work at maximum efficiency. Proper lighting is measured by what is ideal for the job being done. Proper lighting in a factory may be quite different from that required in an office or retail shop. Retailers often use creative lighting to attract customers to a specific display. Jewelry stores provide excellent examples of how lighting can be used to display merchandise.

Lighting is often an inexpensive investment when considering its impact on the overall appearance of the business. Few people seek out businesses that are dimly lit because they convey an image of untrustworthiness. The use of natural and artificial light in combination can give a business an open and cheerful look. Many restaurant chains have added greenhouse glass additions to accomplish this.

Learning Objectives

4. Explain the principles of effective layouts for retailers, service businesses, and manufacturers.

LAYOUT: MAXIMIZING REVENUES, INCREASING EFFICIENCY, AND REDUCING COST

The ideal layout for a building depends on the type of business it houses and on the entrepreneur's strategy for gaining a competitive edge. Retailers design their layouts with the goal of maximizing sales revenue; manufacturers see layout as an opportunity to increase efficiency and productivity and to lower costs.

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Not Your Typical CPA Firm

Lipschulz, Levin and Gray (LLG) is not the typical public accounting firm, a fact that is obvious to even the most casual observer who enters the company's offices in Northbrook, Illinois. Rather than the traditional conservative decor found in most CPA offices, LLG's is quite contemporary and very different. First, there are no offices. No employees (officially called "team members") have enclosed offices; nor do they reside in honeycombs of Dilbert-like cubicles. The same holds true of LLG's partners (called "members"). *Everyone* in the company works in an open expanse with no private offices. The flexible workspace the owners created *really* is flexible. Even the office furniture, including desks, is on wheels so that team members can move it around as needed to collaborate with colleagues.

The transformation from a staid, traditional accounting firm began in 1988, when the partners did some soul-searching in an attempt to find out why the company was earning so little money, employee turnover was high, morale was low, and attracting quality workers was virtually impossible. "We ended up with everybody else's dregs," says managing partner Steve Siegel. A survey of the company's clients revealed that most of them stereotyped LLG as just another boring accounting firm filled with "bean counters." It was then that the partners began taking bold steps toward shaking off every remnant of the boring CPA firm. They started with their name. Although they retained the founding partners names as the firm's official moniker, the partners adopted a nickname that most of their clients continue to use: the Bean Counters. The name conveyed an image of fun and confronted head-on the stereotype of accountants who were as exciting as airline food.

Then managers made some important decisions about the layout of the office space, which, at the time, assigned workers to cubicles and partners to plush private offices. As a result of several planning retreats, managers decided to reduce the size of the workforce, some of the reductions coming through normal attrition but others the result of firings. Morale slipped, and the office space the company leased to house nearly 60 workers looked rather vacant with just 32. Then the partners made a key decision. "We were wasting [a lot of] space," says Siegel, so the partners decided to put the extra space to better use. They installed a miniature golf course right in the middle of the office!

One goal managers hoped to achieve was to get employees out of their offices and cubicles so they could communicate more effectively and be more creative. A "closed door mentality" continued to prevail at LLG, however. Siegel decided that if people were intimidated by doors, the doors would come down. Before long, walls and cubicles began to disappear as well. One day, at a brainstorming session around the miniature golf course, a partner half-jokingly suggested that one way to increase the level of communication in the office was to put the office furniture on wheels. Almost as soon as he suggested it, the manager looked up and said, "Oh gosh. We're going to do this, aren't we?" They did.

Given the drastic changes in office design the partners were making, it became obvious that the company needed a more suitable space to make them all work. Fortunately, the lease was about to end, so LLG hired an architect to help them find and then create a suitable space. Within two years, the architect presented the partners with a set of plans for an office that was 60 percent smaller, was minimalist in nature, but was extremely functional and comfortable. The partners of LLG were sold on the design, and today that office is home to the Bean Counters. It is an open community without cubicles or offices, yet its creative use of space encourages interaction among team members while allowing them to concentrate on their work when necessary. The space is wired for every type of technology, including a "Welcome Wall" dominated by a big-screen television that constantly flashes quotations about various topics such as business, life, and creativity. Architects also incorporated the company's sense of humor into the design. A four-by-nine-foot abacus made of steel conduit and brightly colored plastic balls graces one wall. The entire work space is designed to encourage the continued development of LLG's most valuable resource: the intellectual capital of its team members.

The new layout is working. In addition to its traditional accounting work, LLG has launched four new business consulting divisions, called Sharp Circles. Client referrals have doubled and income has tripled over the past decade. Communication among team members has never been better, and a distinct sense of innovation pervades the office. In addition, employee turnover has plummeted, and clients are more satisfied with the Bean Counters' work. Siegel and the other partners say that the new office and its layout are an important part of LLG's success. "We could not have gotten those Sharp Circle businesses up and running in the old building," he says. "The old building was such a huge impediment to sitting and meeting and just talking about things. Just being next to each other and hearing what's going on has allowed us to get things going."

1. What impact does the space in which people work have on their ability to do their jobs effectively?

2. Use the resources in your library and on the World Wide Web to learn more about ergonomics and layout. Then select a work space (perhaps on your campus or in a local business) and spend some time watching how people work in it. Finally, develop a list of recommendations for improving the design of the space to enhance workers' ability to do their jobs.

Source: Adapted from Nancy K. Austin, "Tear Down the Walls," *Inc.*, April 1999, pp. 66–76.

Layout for Retailers

Retail layout is the arrangement of merchandise in a store and its method of display. A retailer's success depends, in part, on a well-designed floor display. A retail layout should pull customers into the store and make it easy for them to locate merchandise, compare prices, quality, and features, and ultimately make a purchase. In addition, the floor plan should take customers past displays of other items that they may buy on impulse. Between 65 and 70 percent of all buying decisions are made once a customer enters a store, which means that the right layout can boost sales significantly. One study found that 68 percent of the items bought on major shopping trips (and 54 percent on smaller trips) were impulse purchases. Shoppers in this study were heavily influenced by in-store displays, especially those at the ends of aisles (called end-cap displays).[40]

Retailers have always recognized that some locations within a store are superior to others. Customer traffic patterns give the owner a clue to the best location for the highest gross margin items. Merchandise purchased on impulse and convenience goods should be located near the front of the store. Items people shop around for before buying and specialty goods will attract their own customers and should not be placed in prime space. Prime selling space should be restricted to products that carry the highest markups.

Layout in a retail store evolves from a clear understanding of customers' buying habits. If customers come into the store for specific products and have a tendency to walk directly to those items, placing complementary products in their path will boost sales. Observing customer behavior can help the owner identify the "hot spots" where merchandise sells briskly and "cold spots" where it may sit indefinitely. By experimenting with factors such as traffic flow, lighting, aisle size, music type and audio levels, signs, and colors, an owner can discover the most productive store layout.

grid layout—*a formal arrangement of displays arranged in a rectangular fashion so that aisles are parallel.*

free-form layout—*an informal arrangement of displays of various shapes and sizes.*

boutique layout—*an arrangement that divides a store into a series of individual shopping areas, each with its own theme.*

Retailers have three basic layout patterns to choose from: the grid, the free-form, and the boutique. The **grid layout** arranges displays in rectangular fashion so that aisles are parallel. It is a formal layout that controls the traffic flow through the store. Supermarkets and discount stores use the grid layout because it is well suited to self-service stores. This layout uses the available selling space most efficiently, creates a neat, organized environment, and facilitates shopping by standardizing the location of items. Figure 13.2 shows a typical grid layout.

Unlike the grid layout, the **free-form layout** is informal, using displays of various shapes and sizes. Its primary advantage is the relaxed, friendly shopping atmosphere it creates, which encourages customers to shop longer and increases the number of impulse purchases they make. Still, the free-form layout is not as efficient as the grid layout in using selling space, and it can create security problems if not properly planned. Figure 13.3 illustrates a free-form layout.

The **boutique layout** divides the store into a series of individual shopping areas, each with its own theme. It is like building a series of specialty shops into a single store. The boutique layout is more informal and can create a unique shopping environment for customers; small department stores sometimes use this layout (see Figure 13.4).

Business owners should display merchandise as attractively as their budgets allow. Customers' eyes focus on displays, which tell them the type of merchandise the business sells. It is easier for customers to relate to one display than to a rack or shelf of merchandise. Open displays of merchandise can surround the focus display, creating an attractive selling area. Spacious aisles provide shoppers an open view of merchandise and reduce the likelihood of shoplifting. One study found that shoppers, especially women, are reluctant to enter narrow aisles in a store. Narrow aisles force customers to jostle past one another (called the "butt-brush factor"), which makes them extremely nervous. The same study also found that placing shopping baskets in several areas around a store can increase sales. Seventy-five percent of shoppers who pick up a basket buy something, compared to just 34 percent of customers who do not pick up a basket.[41]

Retailers can also boost sales by displaying together items that complement each other. For example, displaying ties near dress shirts or handbags next to shoes often leads to multiple sales. Placement of items on store shelves is important, too, and storeowners must keep their target customers in mind when stocking shelves. For example, putting hearing aid batteries on bottom shelves where the elderly have trouble getting to them or placing popular children's toys on top shelves where little ones cannot reach them can hurt sales. Even

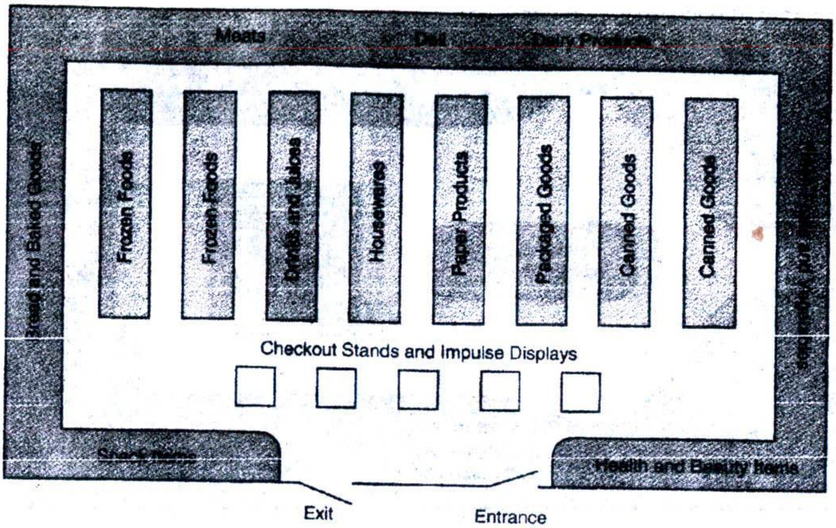


FIGURE 13.2 The Grid Layout

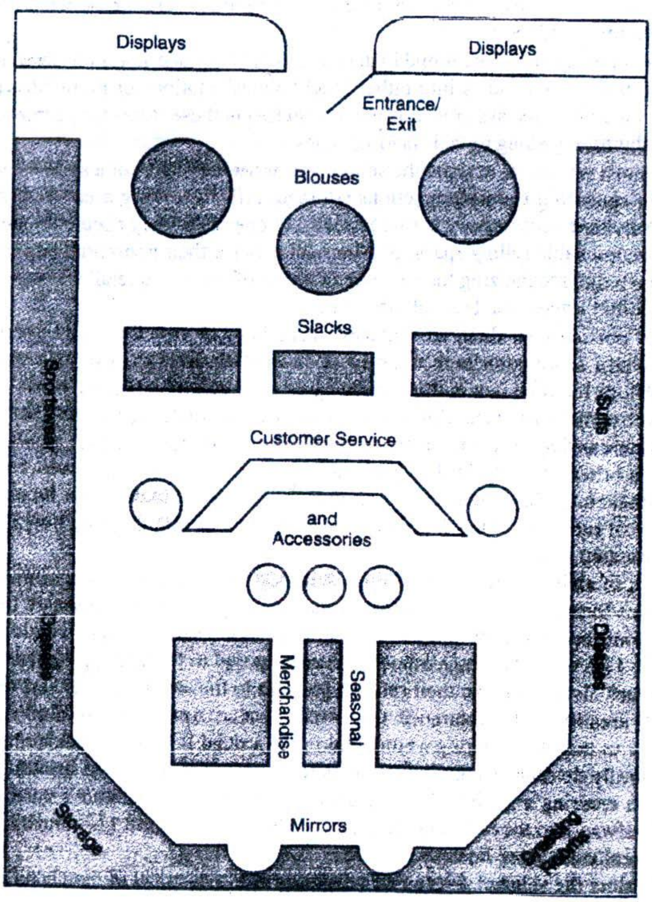
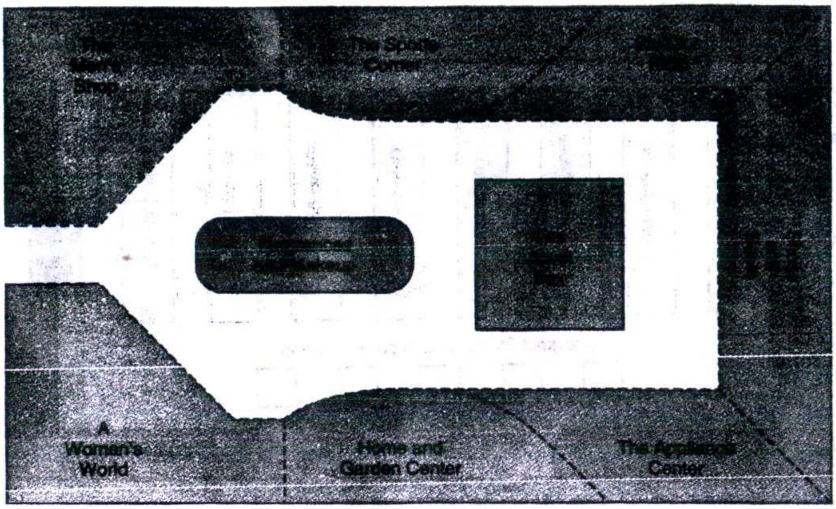


FIGURE 13.3 The Free-Form Layout

FIGURE 13.4 The Boutique Layout



background music can be a merchandising tool if the type of music playing in a store matches the demographics of its target customers. Music can be a stimulant to sales because it has been proven to reduce resistance, warps the sense of time allowing shoppers to stay longer in the store, and helps to produce a positive mental association between the music and the intended image of the store.[42]

One good example of this can be found in the collection of antique stores clustered in Ozark, Missouri. Each of the stores tunes into either local "oldies" stations or more "down-home" bluegrass tunes on their stereo systems. It is not uncommon in these stores for people to browse for hours while humming along to their favorite tunes.

Retailers must remember to separate the selling and nonselling areas of a store. Never waste prime selling space with nonselling functions (storage, office, dressing area, etc.). Although nonselling activities are necessary for a successful retail operation, they should not take precedence and occupy valuable selling space. Many retailers place their nonselling departments in the rear of the building, recognizing the value of each foot of space in a retail store and locating their most profitable items in the best selling areas.

Not every portion of a small store's interior space is of equal value in generating sales revenue. Certain areas contribute more to revenue than others. The value of store space depends on floor location in a multistory building, location with respect to aisles and walkways, and proximity to entrances. Space values decrease as distance from the main entry-level floor increases. Selling areas on the main level contribute a greater portion to sales than those on other floors in the building because they offer greater exposure to customers than either basement or higher-level locations. Therefore, main-level locations carry a greater share of rent than other levels. Figure 13.5 offers one example of how rent and sales could be allocated by floors.

The layout of aisles in the store has a major impact on the customer exposure merchandise receives. Items located on primary walkways should be assigned a higher share of rental costs and should contribute a greater portion to sales revenue than those displayed along secondary aisles. Figure 13.6 shows that high-value areas are exposed to two secondary aisles.

Space values also depend on their relative position to the store entrance. Typically, the farther away an area is from the entrance, the lower its value. Another consideration is that most shoppers turn to the right entering a store and move around it counterclockwise. (This apparently is culturally determined. Studies of shoppers in Australia and Great Britain find that they turn *left* upon entering a store.) Finally, only about one-fourth of a store's customers will go more than halfway into the store. Using these characteristics, Figure 13.7 illustrates space values for a typical small store layout.

Understanding the value of store space ensures proper placement of merchandise. The items placed in the high-rent areas of the store should generate adequate sales and contribute enough to profit to justify their high-value locations.

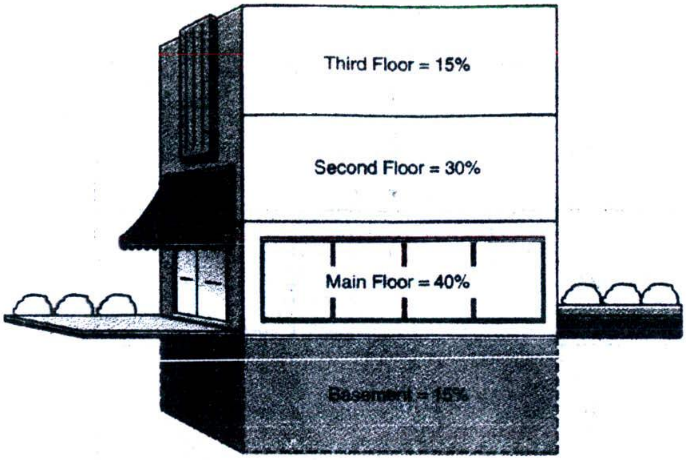


FIGURE 13.5 Rent Allocation by Floors

Source: Retailing. 6th ed. 1997 Prentice Hall. © Dale M. Lewison.

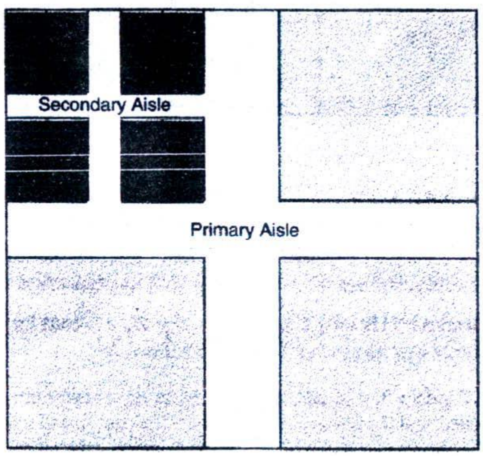


FIGURE 13.6 Rent Allocation Based on Traffic Aisles

Source: Retailing. 6th ed. 1997 Prentice Hall. © Dale M. Lewison.

The decline in value of store space from front to back of the shop is expressed in the 40-30-20-10 rule. This rule assigns 40 percent of a store's rental cost to the front quarter of the shop, 30 percent to the second quarter, 20 percent to the third quarter, and 10 percent to the final quarter. Similarly, each quarter of the store should contribute the same percentage of sales revenue.

For example, suppose that a small department store anticipates $720,000 in sales this year. Each quarter of the store should generate the following sales volume:

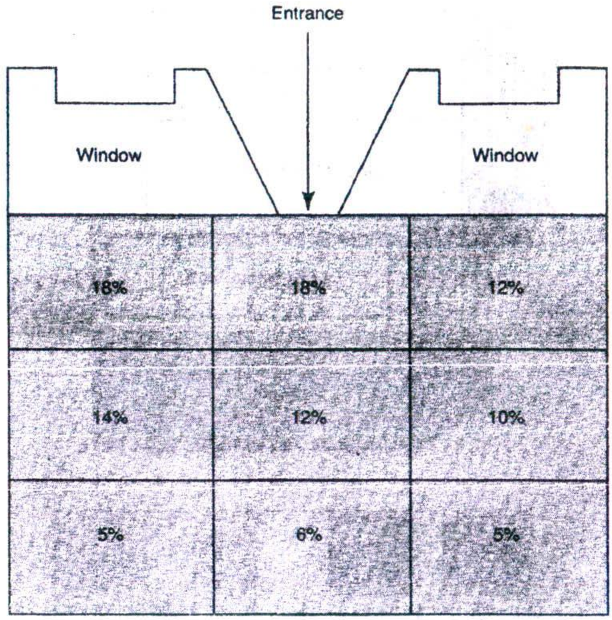
Front quarter	$720,000 × 0.40 = $288,000
Second quarter	$720,000 × 0.30 = $216,000
Third quarter	$720,000 × 0.20 = $144,000
Fourth quarter	$720,000 × 0.10 = $72,000
Total	$720,000

Layout for Manufacturers

Manufacturing layout decisions take into consideration the arrangement of departments, workstations, machines, and stock-holding points within a production facility. The general objective is to arrange these elements to ensure a smooth workflow (in a production facility) or a particular traffic pattern (in a service facility or organization).

FIGURE 13.7 Space Values for a Small Store

Source: Retailing, 6th ed. 1997 Prentice Hall. © Dale M. Lewison.



Manufacturing facilities have come under increasing scrutiny as firms attempt to improve quality, decrease inventories, and increase productivity through facilities that are integrated, flexible, and controlled. Facility layout has a dramatic effect on product mix, product processing, and material handling, storage, and control. as well as production volume and quality.

FACTORS IN MANUFACTURING LAYOUT. The ideal layout for a manufacturing operation depends on a number of factors, including the following:

- *Type of product.* Product design and quality standards; whether the product is produced for inventory or for order; and the physical properties such as the size of materials and products, special handling requirements, susceptibility to damage, and perishability.
- *Type of production process.* Technology used; types of materials handled; means of providing a service; and processing requirements in terms of number of operations involved and amount of interaction between departments and work centers.
- *Ergonomic considerations.* To ensure worker safety; to avoid unnecessary injuries and accidents; and to increase productivity.
- *Economic considerations.* Volume of production; costs of materials, machines, workstations, and labor; pattern and variability of demand; and length of permissible delays.
- *Space availability within the facility itself.*

TYPES OF MANUFACTURING LAYOUTS. Manufacturing layouts are categorized by either the work flow in a plant or by the production system's function. There are three basic types of layouts that manufacturers can use separately or in combination—product, process, and fixed position—and they are differentiated by their applicability to different conditions of manufacturing volume.

product (line) layout —*an arrangement of workers and equipment according to the sequence of operations performed on a product.*

PRODUCT LAYOUTS. In a **product (or line) layout**, a manufacturer arranges workers and equipment according to the sequence of operations performed on the product (see **Figure** 13.8). Conceptually, the flow is an unbroken line from raw material input or customer arrival to finished goods to customer's departure. This type of layout is applicable to rigid-flow, high-volume, continuous process or a mass-production operation, or when the service or product is highly standardized. Automobile assembly plants, paper mills, and oil refineries are examples of product layouts.

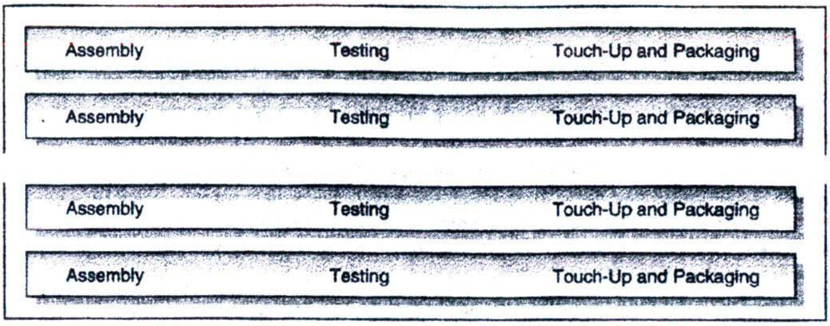


FIGURE 13.8 Product Layout

Product layouts offer the advantages of lower material handling costs; simplified tasks that can be done with low-cost, lower-skilled labor; reduced amounts of work-in-process inventory; and relatively simplified production control activities. All units are routed along the same fixed path, and scheduling consists primarily of setting a production rate.

Disadvantages of product layouts are their inflexibility, monotony of job tasks, high fixed investment in specialized equipment, and heavy interdependence of all operations. A breakdown in one machine or at one workstation can idle the entire line. This layout also requires business owners to duplicate many pieces of equipment in the manufacturing facility, which for a small firm can be cost prohibitive.

PROCESS LAYOUTS. In a **process layout**, a manufacturer groups workers and equipment according to the general function they perform, without regard to any particular product or customer (see Figure 13.9). Process layouts are appropriate when production runs are short, when demand shows considerable variation and the costs of holding finished goods inventory are high, or when the service or product is customized.

process layout —*an arrangement of workers and equipment according to the general function they perform, without regard to any particular product or customer.*

Process layouts have the advantages of being flexible for doing custom work and promoting job satisfaction by offering employees diverse and challenging tasks. Its disadvantages are the higher costs of materials handling, more skilled labor, lower productivity, and more complex production control. Because the work flow is intermittent, each job must be individually routed through the system, scheduled at the various work centers, and have its status monitored.

FIXED POSITION LAYOUTS. In **fixed position layouts**, materials do not move down a line as in a production layout but rather, due to the weight, size, or bulk of the final product, are assembled in one spot. In other words, workers and equipment go to the material rather than having the material flow down a line to them. Aircraft assembly plants and shipyards typify this kind of layout.

fixed position layout —*an arrangement in which materials do not move down a production line but rather, because of their weight, size, or bulk, are assembled in one spot.*

FUNCTIONAL LAYOUTS. Many layouts are designed with more than one objective or function in mind and, therefore, combinations of the various layouts are common. For example, a supermarket, though primarily arranged on the basis of marketing, is partly a storage layout; a cafeteria represents not only a layout by marketing function but also by work flow (a food assembly line); and a factory may arrange its machinery in a process layout but perform assembly operations in a fixed sequence, as in a product layout.

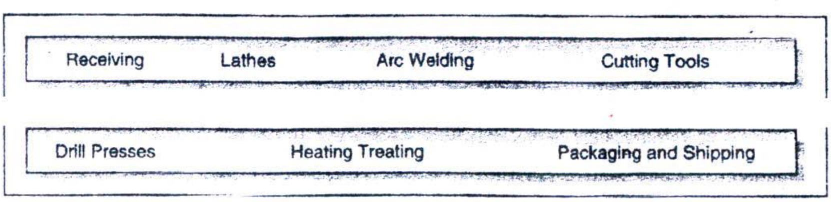


FIGURE 13.9 Process Layout

Designing Layouts

The starting point in layout design is determining how and in what sequence product parts or service tasks flow together. One of the most effective techniques is to create an overall picture of the manufacturing process using assembly charts and process flowcharts. Given the tasks and their sequence, plus knowledge of the volume of products to be produced or of customers to be served, an entrepreneur can analyze space and equipment needs to get an idea of the facility's capacity. When using a product or line layout, these demands take precedence, and manufacturers must arrange equipment and workstations to fit the production tasks and their sequence. With a process or functional layout, different products or customers with different needs place demands on the facility. Rather than having a single best flow, there may be one flow for each product or customer, and compromises in efficiency may be necessary. As a result, the layout for any one product or customer may not result in the achievement of optimal capacity but is flexible to serve the specific situation.

ANALYZING PRODUCTION LAYOUTS. Although there is no general procedure for analyzing the numerous interdependent factors that enter into layout design, specific layout problems lend themselves to detailed analysis. Two important criteria for selecting and designing a layout are worker effectiveness and material handling costs. A layout should be designed to improve job satisfaction and to use workers at the highest skill level for which they are being paid. This applies just as much to an office layout, where engineers may spend half a workday delivering blueprints, which a clerk could do, as it does to a plant layout, where machinists leave their stations to travel a long distance to secure needed tools.

A Company Example

When a team of manufacturing specialists purchased the ***Alexander Doll Company***, *a maker of collectible dolls that was founded in 1923, the company's six-story manufacturing operation in New York's Harlem needed a major overhaul. The new owners were experts in designing lean, efficient production systems, and they immediately set about creating one for this classic and well-known maker of dolls. An analysis of the existing layout revealed the use of many archaic principles, which resulted in a work-in-process inventory of more than 90,000 partly finished dolls and a cycle time (the time between receiving a customer's order and delivering a finished doll) of 16 weeks. As they redesigned the factory layout, the new owners involved the 470 employees, who now work in teams of seven or eight. With the new design, work-in-process inventory has fallen by 96 percent, and the company now fills orders within one or two weeks. The new layout played a major role in the company's revitalization.*[43]

Manufacturers can lower materials handling costs by using layouts designed so that product flow is automated whenever possible and flow distances and times are minimized. The extent of automation depends on the level of technology and amount of capital available, as well as behavioral considerations of employees. Flow distances and times are usually minimized by locating sequential processing activities or interrelated departments in adjacent areas. The following features are important to a good manufacturing layout:

1. planned materials flow pattern
2. straight-line layout where possible
3. straight, clearly marked aisles
4. backtracking kept to a minimum
5. related operations close together
6. minimum of in-process inventory
7. easy adjustment to changing conditions
8. minimum materials handling distances
9. minimum of manual handling
10. no unnecessary rehandling of material
11. minimum handling between operations
12. materials delivered to production employees

13. material efficiently removed from the work area
14. materials handling being done by indirect labor
15. orderly materials handling and storage
16. good housekeeping

BUILD, BUY, OR LEASE?

7. Evaluate the advantages and disadvantages of building, buying, or leasing a building.

Once an entrepreneur has a good idea of the specific criteria to be met for a building to serve the needs of her business, the issue turns to what she can afford to spend. The ability to obtain the best possible physical facilities in relation to available cash may depend largely on whether an entrepreneur decides to build, buy, or lease a building.

The Decision to Build

If a business had unlimited funds, the owner could design and build a perfect facility. However, few new business owners have this luxury. Constructing a new facility can project a positive image to potential customers. The business looks new and, consequently, creates an image of being modern, efficient, and top quality. A new building can incorporate the most modern features during construction, and these might significantly lower operating costs. When such costs are critical to remaining competitive, it may be reasonable to build.

In some rapidly growing areas, there are few existing buildings to buy or lease that meet an entrepreneur's requirements. In these situations, a business owner must consider the cost of constructing a building as a significant factor in her initial estimates of capital needs and break-even point. Constructing a building has high initial fixed expenses that an owner must weigh against the facility's ability to attract additional sales revenue and to reduce operating costs.

The Decision to Buy

In many cases, there may be an ideal building in the area where an entrepreneur wants to locate. Buying the facility allows her to remodel it without seeking permission from anyone else. As with building, buying can put a drain on the business's financial resources, but the owner knows exactly what her monthly payments will be. Under a lease, rental rates can (and usually do) increase over time. If an owner believes that the property will actually appreciate in value, then purchasing it can be a wise investment. In addition, an owner can depreciate the building each year, and both depreciation and interest are tax-deductible expenses.

When considering purchasing a building, the owner should use the same outline of facilities requirements developed for the building option to ensure that this property will not be excessively expensive to modify for her use. Remodeling can add a significant initial expense. The layout of the building may be suitable in many ways, but it may not be ideal for a particular business. Even if a building housed the same kind of business, its existing layout may be completely unsuitable for the way the new owner plans to operate.

Building or buying a building greatly limits an entrepreneur's mobility, however. Some business owners prefer to stay out of the real estate business to retain maximum flexibility and mobility. Plus, not all real estate appreciates in value. Surrounding property can become run down and, consequently, lower a property's value despite the owner's efforts to keep it in excellent condition.

The Decision to Lease

The major advantage of leasing is that it requires no large initial cash outlay, so the business's funds are available for purchasing inventory or for current operations. Firms that are short on cash will inevitably be forced to lease facilities. All lease expenses are tax deductible.

One major disadvantage of leasing is that the property owner might choose not to renew the lease. A successful business might be forced to move to a new location, and such relocation can be extremely costly and could result in a significant loss of established customers. In many cases it is almost like starting the business again. Also, if a business is successful, the property owner may ask for a significant increase in rent when the lease renewal is negotiated. The owner of the building is well aware of the costs associated with moving and has the upper hand in the negotiations. In some lease arrangements the owner is compensated, in addition to a monthly rental fee, by a percentage of the tenant's gross sales. This is common in malls and shopping centers.

Still another disadvantage to leasing is the limitation on remodeling. If the building owner believes that modifications will reduce the future rental value of the property, he will likely require a long-term lease at increased rent. In addition, all permanent modifications of the structure become the property of the building owner.

CHAPTER SUMMARY

1. Explain the stages in the location decision: choosing the region, the state, the city, and the final site.

- The location decision is one of the most important decisions an entrepreneur will make, given its long-term effects on the company. An entrepreneur should look at the choice as a series of increasingly narrow decisions: Which region of the country? Which state? Which city? Which site? Choosing the right location requires an entrepreneur to evaluate potential sites with her target customers in mind. Demographic statistics are available from a wide variety of sources, but government agencies such as the Census Bureau have a wealth of detailed data that can guide an entrepreneur in her location decision.

2. Describe the location criteria for retail and service businesses.

- For retailers, the location decision is especially crucial. Retailers must consider the size of the trade area, the volume of customer traffic, number of parking spots, availability of room for expansion, and the visibility of a site.

3. Outline the basic location options for retail and service businesses.

- Retail and service businesses have six basic location options: central business districts (CBDs), neighborhoods, shopping centers and malls, near competitors, outlying areas, and at home.

4. Explain the site selection process for manufacturers.

- A manufacturer's location decision is strongly influenced by local zoning ordinances. Some areas offer industrial parks designed specifically to attract manufacturers. Two crucial factors for most manufacturers are the reliability (and the cost of transporting) raw materials and the quality and quantity of available labor.
- A foreign trade zone is a specially designated area in or near a U.S. customs port of entry that allows resident companies to import materials and components from foreign countries; assemble, process, manufacture, or package them; and then ship the finished product while either reducing or eliminating tariffs and duties.
- Empowerment zones offer businesses tax breaks on the investments they make within zone boundaries.
- Business incubators are locations that offer flexible, low-cost rental space to their tenants as well as business and consulting services. Their goal is to nurture small companies until they are ready to "graduate" into the business community. Many government agencies and universities offer incubator locations.

5. Describe the criteria used to analyze the layout and design considerations of a building, including the Americans with Disabilities Act.

- When evaluating the suitability of a particular building, an entrepreneur should consider several factors: size (is it large enough to accommodate the business with some room for growth?); construction and external appearance (is the building structurally sound and does it create the right impression for the business?); entrances (are they inviting?); legal issues (does the building comply with the Americans with Disabilities Act? If not how much will it cost to bring it up to standard?); signs (are they legible, well located, and easy to see?); interior (does the interior design contribute to our ability to make sales, and is it ergonomically designed?); lights and fixtures (is the lighting adequate for the tasks workers will be performing, and what is the estimated cost of lighting?).

6. Explain the principles of effective layouts for retailers, service businesses, and manufacturers.

- Layout for retail stores and service businesses depends on the owner's understanding of her customers' buying habits. Retailers have three basic layout options from which to choose: grid, free-form, and boutique. Some areas of a retail store generate more sales per square foot and are, therefore, more valuable.
- The goal of a manufacturer's layout is to create a smooth, efficient work flow. Three basic options exist: product layout, process layout, and fixed position layout. Two key considerations are worker productivity and materials handling costs.

7. Evaluate the advantages and disadvantages of building, buying, and leasing a building.

- Building a new building gives an entrepreneur the opportunity to design exactly what he wants in a brand-new facility; however, not every small business owner can afford to tie up significant amounts of cash in fixed assets. Buying an existing building gives a business owner the freedom to renovate as needed, but this can be an expensive alternative. Leasing a location is a common choice because it is economical, but the business owner faces the uncertainty of lease renewals, rising rents, and renovation problems.

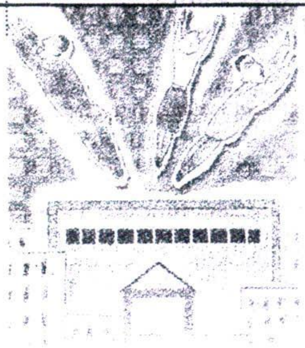
DISCUSSION QUESTIONS

1. How do most small business owners choose a location? Is this wise?
2. What factors should a manager consider when evaluating a region in which to locate a business? Where are such data available?
3. Outline the factors important when selecting a state in which to locate a business.
4. What factors should a seafood processing plant, a beauty shop, and an exclusive jewelry store consider in choosing a location? List factors for each type of business.
5. What intangible factors might enter into the entrepreneur's location decision?
6. What are zoning laws? How do they affect the location decision?
7. What is the trade area? What determines a small retailer's trade area?
8. Why is it important to discover more than just the number of passersby in a traffic count?
9. What types of information can the entrepreneur collect from census data?
10. Why may a "cheap location" not be the "best location"?
11. What is a foreign trade zone? An empowerment zone? A business incubator? What advantages and disadvantages does each one of these offer a small business locating there?
12. Why is it costly for a small firm to choose a location that is too small?
13. What function does a small firm's sign serve? What are the characteristics of an effective business sign?
14. Explain the Americans with Disabilities Act. Which businesses does it affect? What is its purpose?
15. What is ergonomics? Why should entrepreneurs utilize the principles of ergonomics in the design of their facilities?
16. Explain the statement: "Not every portion of a small store's interior space is of equal value in generating sales revenue." What areas are most valuable?
17. What are some of the key features that determine a good manufacturing layout?
18. Summarize the advantages and disadvantages of building, buying, and leasing a building.

THE BUSINESS DISC

Launch *The Business Disc* and return to the section where Harry describes various options for a location for your business: urban residential, downtown, shopping center, highway, or at home. From the "Go To" menu, select "Events from PART 1 - A," and click on "Harry explains various location options." Develop a list of the factors that would characterize the ideal location for your business. How would the factors on your list influence the location choices presented on *The Business Disc*? What are the advantages and the disadvantages of the location you chose?

BEYOND THE CLASSROOM . . .



1. Select a specific type of business you would like to go into one day and use census data and Commerce Department reports from the World Wide Web or the local library to choose a specific site for the business in the local region. What location factors are critical to the success of this business? Would it be likely to succeed in your hometown?

2. Interview a sample of local small business owners. How did they decide on their particular locations? What are the positive and negative features of their existing locations?

3. Locate the most recent issue of either *Entrepreneur* or *Fortune* describing the "best cities for (small) business." (For *Entrepreneur*, it is usually the October issue, and for *Fortune*, it is normally an issue in November.) Which cities are in the top 10? What factors did the magazine use to select these cities? Pick a city and explain what makes it an attractive destination for locating a business there.

4. Select a manufacturing operation, a wholesale business, or a retail store, and evaluate their layouts using the guidelines presented in this chapter. What changes would you recommend? Why? Does the layout contribute to a more effective operation?

5. Choose one of the businesses you studied in Exercise 4 and design an improved layout for the operation. How expensive would these alterations be?

6. Visit the Web site for the Census Bureau at www.census.gov. Go to the census data for your town and use this information to discuss its suitability as a location for the following types of businesses:
   - a new motel with 25 units
   - a bookstore
   - an exclusive women's clothing shop
   - a Mexican restaurant
   - a residential plumber
   - a day care center
   - a high-quality stereo shop
   - a family hair care center

7. Use the resources on the World Wide Web or the local library to prepare a demographic profile of your hometown or city or of the town or city in which you attend college. Using the demographic profile as an analytical tool, what kinds of businesses do you think would be successful there? Unsuccessful? Explain. Use these same resources to prepare an analysis of the competition in the area.