

CASE 16: ANALYZING STRATEGIC AND COMPETITIVE ADVANTAGE

DETERMINING OPERATING LEVERAGE

Pony Espresso is a small business that sells specialty coffee drinks at office buildings. Each morning and afternoon, trucks arrive at offices' front entrances, and the office employees purchase various beverages with names such as Java du Jour and Café de Colombia. The business is profitable. But Pony Espresso offices are located to the north of town, where lease rates are less expensive, and the principal sales area is south of town. This means that the trucks must drive cross-town four times each day.

The cost of transportation to and from the sales area, plus the power demands of the trucks' coffee brewing equipment, is a significant portion of the variable costs. Pony Espresso could reduce the amount of driving—and, therefore, the variable costs—if it moves the offices much closer to the sales area.

Pony Espresso presently has fixed costs of \$10,000 per month. The lease of a new office, closer to the sales area, would cost an additional \$2,200 per month. This would increase the fixed costs to \$12,200 per month.

Although the lease of new offices would increase the fixed costs, a careful estimate of the potential savings in gasoline and vehicle maintenance indicates that Pony Espresso could reduce the variable costs from \$0.60 per unit to \$0.35 per unit. Total sales are unlikely to increase as a result of the move, but the savings in variable costs should increase the annual profit.

You have been hired by Pony Espresso to assist in the cost analysis and new lease options to determine a growth in profit margin. You will also need to calculate a degree of operating leverage to better understand the company's profitability. Degree of operating leverage (DOL) will give the CEO of Pony Espresso, Darian Presley, a great deal of information for setting operating targets and planning profitability.

SOME PARTICULARS YOU SHOULD KNOW

1. Consider the information provided—especially look at the change in the variability of the profit from month to month. From November through January, when it is much more difficult to lure office workers out into the cold to purchase coffee, Pony Espresso barely breaks even. In fact, in December of 2005, the business lost money.
2. First, develop the cost analysis on the existing lease information using the monthly sales figures provided to you in the file **PONYESPRESSO.xls**. Second, develop the cost analysis from the new lease information provided above.
3. You need to calculate the variability that is reflected in the month-to-month standard deviation of earnings for the current cost structure and the projected cost structure.
4. Do not consider any association with downsizing such as overhead; simply focus on the information provided to you.
5. You will need to calculate the EBIT—earnings before interest and taxes.
6. Would the DOL and business risk increase or decrease if Pony Espresso moved its office?
Note: Variability in profit levels, whether measured as EBIT, operating income, or net income, does not necessarily increase the level of business risk as the DOL increases.
7. File: **PONYESPRESSO.xls** (Excel file).

CASE 17: BUILDING A DECISION SUPPORT SYSTEM

BREAK-EVEN ANALYSIS

Ski-YA! is a Colorado-based company that sells high-performance ski equipment. When it comes to the serious business of sliding downhill, the Ski-YA! dudes of Colorado don't trouble themselves with petty categories; to them, all alpine snow equipment is summed up in one word, AWESOME!

This season's offerings at Ski-YA! are no exception. Skis continue to grow wider for better flotation beyond the groomers, and the sidecuts, the stick's hourglass shape designed to help a skier turn, now reflect the needs of terrain skiers. Even bindings have been rejiggered: forget the drill and screwdriver; the latest fittings snap or slide into place, extending ski life and improving energy transfer.

The Ski-YA! company wants to begin selling a new pair of skis, labeled the Downhill Demons, in the upcoming ski season. It wants to know how many skis it will have to sell in order to break even on its investment in materials and equipment. The chief financial officer has provided the following information:

Fixed Costs

Metal molding machine:	\$200,000
Milling machine:	\$150,000
Sander and grinder:	\$10,000
Presses:	\$25,000
Silkscreen machine:	\$50,000

Variable Costs (per Unit)

Packaging material	\$5.00
Raw material	\$100.00
Shipping	\$20.00

The marketing department estimates that it can sell the new skis for \$400.00 per unit. Further projections estimate that an average of 200 units will be sold per month. The goal is that the skis will break even and start to earn a profit within the first year. Ski-YA!'s target profit level for the end of the first fiscal year is \$100,000.

SOME PARTICULARS YOU SHOULD KNOW

1. First, create a break-even analysis where your goal is to determine how many units you must sell to recover all of your fixed costs.
2. Then create a target profit analysis where your goal is to determine how many units you must sell to reach a predefined profit level. The difference between the two is that at breakeven your target profit is zero, whereas when you specify a target profit that is greater than zero, you are setting your goal above the break-even point.
3. You will want to create a table sheet that contains the data used to generate the break-even/target profit chart. This includes 10 data points on either side of the break-even/target profit point.
4. Finally create a chart where you can visually measure your break-even or target profit level along with total fixed and variable costs. If you choose to calculate the number of months before you reach a break-even or target profit, those numbers will be reported here.
5. File: **SkiYA.xls** (Excel file).

CASE 18: CREATING A FINANCIAL ANALYSIS

QUALIFICATION AND AMORTIZATION WORKSHEETS

The Foothills Savings Bank (FSB) is a federally insured stock savings bank which was organized in 1982 as a privately insured savings and loan association in Denver, Colorado. It received federal insurance in 1985 and a federal savings bank charter in 1986. FSB is a member of the Federal Home Loan Bank (FHLB) system and its deposits are insured by the Federal Deposit Insurance Corporation (FDIC) to the maximum amount provided by law.

The Foothills Savings Bank offers loans for owner-occupied properties, second homes, and investment homes. FSB offers first trust residential conventional fixed rate and ARM (adjustable rate mortgage) loans. Conventional financing is any mortgage that is not insured or guaranteed by federal, state, or local governments. FSB is now offering an online prequalification worksheet for its customers or prospective customers to use. FSB requires a minimum of 10 percent down, which is generally required for conventional financing.

It is your responsibility to complete a mortgage qualification worksheet and then create a mortgage amortization analysis worksheet from the data in the mortgage qualification worksheet.

SOME PARTICULARS YOU SHOULD KNOW

1. A template for the mortgage qualification worksheet has been created; however, you need to complete the formulas.
2. The Qualifying Section:
 - The first qualifying number needs to calculate the maximum monthly payment, assuming there are no long-term debts. It is computed by multiplying the total income by the housing cost ratio and dividing the result by 12.
 - The second qualifying number takes into account the monthly debt payments, applying the total debt service ratio. It is calculated by multiplying the total debt by the debt service ratio and dividing the result by 12.
 - Mortgage companies usually qualify people for monthly payments that are no higher than the lesser of the two results.
 - By default, your worksheet should assume a housing cost ratio of 0.28 and a total debt service ratio of 0.36, which are standards often used for conventional mortgages.

3. The Loan Amount Section:

The table created below the qualifying section calculates the amount of a loan you might qualify for with the monthly payment. Depending on the circumstances, some or all of the following will be true:

In all cases, the monthly payment will include principal and interest payments.

- In most cases, it will include a monthly escrow deposit to cover taxes and mortgage insurance, if any. In some cases, homeowner's insurance is also included in this calculation. Use your best guess estimates for these figures.
 - If the customer is buying a condominium or co-op unit, the monthly payment figure may also include the homeowner's dues and/or maintenance fees. You will need to estimate these monthly costs and type them into the appropriate cells.
4. Creating an amortization analysis worksheet:
 - Use the data from the mortgage qualification worksheet to create an amortization table. You will need to calculate beginning balance, principal paid, interest paid, total principal, total interest, and ending balance per payment period for the life of the loan.
 5. File: **Mortgage.xls** (Excel file).

CASE 19: BUILDING A SCHEDULING DECISION SUPPORT SYSTEM

AIRLINE CREW SCHEDULING

Rockies Airline is a new airline company that maintains a schedule of two daily flights between Salt Lake City, Denver, and Chicago. Rockies Airline took to the air on February 11, 2004, with the inauguration of service between Denver International Airport and Salt Lake City. Every Rockies Airline aircraft is outfitted with roomy all-leather seats, each equipped with 24 channels of DIRECTV programming.

Rockies Airline must strategically position itself as a low-cost provider in a very volatile industry. Therefore, it must work toward finding a minimum cost assignment of flight crews to a given flight schedule while satisfying restrictions dictated by the Federal Aviation Administration. Rockies Airline needs to solve the crew scheduling problem that is an involved and time-consuming process.

To begin, you will want to figure out all the possible crew rotations. You will want to find an approximate expected cost of each combination and then solve the traditional crew scheduling problem by using these costs. Second, you will want to calculate the crew constraints in order to determine the decision variables, constraints, and objectives.

You have been given Rockies Airline flight schedule as follows:

From	To	Departure	Arrival	Departure	Arrival
Salt Lake City	Denver	9:00 AM	12:00 PM	2:00 PM	5:00 PM
Salt Lake City	Chicago	10:00 AM	2:00 PM	3:00 PM	7:00 PM
Denver	Salt Lake City	8:00 AM	11:00 PM	2:00 PM	5:00 PM
Denver	Chicago	9:00 AM	11:00 PM	3:00 PM	5:00 PM
Chicago	Salt Lake City	8:00 AM	12:00 PM	2:00 PM	6:00 PM
Chicago	Denver	10:00 AM	12:00 PM	4:00 PM	6:00 PM

SOME PARTICULARS YOU SHOULD KNOW

1. A crew that leaves a city in the morning has to return there at night.
2. The crew can be brought back on another airline. This would always be on an 8 PM flight. There are 6 airplanes in use.
3. When a crew is flying, the cost is \$200 per hour.
4. When a crew is waiting or being flown back, the cost is \$75 per hour.
5. How should the company schedule its crews to minimize cost?
6. *Hint:* You will want to install the Solver Add-in to assist with this.
7. File: **CREWSCHEDULING.xls** (Excel file).

CASE 20: CREATING A DATABASE MANAGEMENT SYSTEM

MOUNTAIN BIKE RENTALS

Vail Resort in Vail, Colorado, is internationally known as one of the best places in North America for mountain biking. Since 1973, Slopeside Bike Rentals has been a tradition in the area. At Slopeside Bike Rentals customers will find the largest selection of bikes, parts, accessories, books, maps, clothing, shocks, helmets, eyewear, shoes, car racks, and touring gear in the area with

everything you need for on and off the road. Its state-of-the-art demo and rental program has everything from premium dual suspension to kids' bikes and trailers.

You have been employed for the past three summers by Slopeside Bike Rentals. Recently, there has been a surge in business and the owners need a more accurate way to manage the rental business. You have decided to create a database to help the owners keep track of the bike rentals, who the customers are, amount paid, and any damage to the bikes when they are rented. Currently Slopeside Bike Rentals owns 13 mountain bikes in its fleet of rentals. The bikes vary in type, size, and parts. When customers rent bikes, they are required to leave their driver's license number and to give you a home address, phone number, and credit card number.

You have designed the entity classes and primary keys for the database as the following:

Entity	Primary Key
<i>Bike</i>	<i>Bike_ID</i>
<i>Customer</i>	<i>Customer_ID</i>
<i>Rental</i>	<i>Rental_ID</i>

You have also identified the following business rules:

1. Rentals can have many customers assigned but must have at least one.
2. A bike must be assigned to one and only one rental type.
3. A customer can rent one or more bikes at one time.
4. A bike can be assigned to only one customer but need not be assigned to any customer.

Your job is to be completed in the following phases:

1. Develop and describe the entity-relationship diagram.
2. Use normalization to assure the correctness of the tables (relations).
3. Create the database using a personal DBMS package (preferably Microsoft Access).
4. Slopeside Bike Rentals has the following fee structures for its 13 bike rentals:

Description	Cost per Hour
Specialized Rockhopper	\$12
Specialized Rockhopper	12
Trek Fuel 70	12
Trek Fuel 80	15
Trek Fuel 80	15
Trek Fuel 90	16
Marin Downhill FRS	16
Marin Downhill FRS	16
Marin Downhill FRS	16
Specialized Stumpjumper FSR	18
Specialized Stumpjumper FSR	18
Specialized Stumpjumper FSR	18
Specialized Stumpjumper Hardtail	20

Figure GP.3

Slopeside Bike Rental Report

Slopeside Bike Rental Report

Description	Date	Last Name	First Name	Amount Paid
Specialized Rockhopper				
	5/30/2005	Smith	Sue	\$24.00
	6/2/2005	Smith	Sue	\$42.00
	7/5/2005	Dunn	David	\$72.00
Summary for Specialized Rockhopper (3 detail records)				\$138.00
Trek Fuel 70				
	6/29/2005	Myers	Mike	\$24.00
	6/30/2005	Myers	Mike	\$24.00
Summary for Trek Fuel 70 (2 detail records)				\$48.00
Trek Fuel 80				
	7/5/2005	Elliott	Raymond	\$30.00
	7/7/2005	Elliott	Raymond	\$15.00
	7/11/2005	Lapierre	Lynne	\$225.00
	7/12/2005	Lapierre	Lynne	\$37.50
Summary for Trek Fuel 80 (4 detail records)				\$307.50
Trek Fuel 90				
	7/1/2005	Smith	Sue	\$48.00
	7/11/2005	Dunn	David	\$32.00
Summary for Trek Fuel 90 (2 detail records)				\$80.00
Grand Total				\$573.50

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5. Use the DBMS package to create the basic report in Figure GP.3.

SOME PARTICULARS YOU SHOULD KNOW

1. You may not be able to develop a report that looks exactly like the one in Figure GP.3. However, your report should include the same information.
2. One of your tables will need a composite primary key.
3. File: Not applicable.

CASE 21: EVALUATING THE SECURITY OF INFORMATION

WIRELESS NETWORK VULNERABILITY

Empty cans of Pringles could be helping malicious hackers spot wireless networks that are open to attack. Security companies have demonstrated that a directional antenna made with a Pringles can most often significantly improves the chances of finding wirelessly networked computers. An informal survey carried out by i-sec (an Internet security research company) using the homemade antenna found that over two-thirds of the networks surveyed were doing nothing to protect themselves. Known as the “PringlesCantenna,” these are rapidly becoming popular because they are cheap (under \$10) and easy to set up.

Not surprisingly, wireless network security, particularly regarding wireless local area networks (WLANs), is the number one concern of network managers, and an entire industry has grown to serve the ever-changing demands of wireless-network-based information integrity. As companies and home users have gradually adopted wireless technology, special security precautions are required to deal with the unique nature of wireless communications. After all, wireless purposely

puts information out on the airwaves, and anyone within range and equipped with an appropriate receiver (e.g., PringlesCantenna) would be able to grab this information and put it to all kinds of questionable use. Since this is the case, many wireless networks implement inherent authentication and encryption mechanisms to provide basic assurance to wireless users that their information will at least be difficult to decrypt and their networks at least challenging to crack.

SOME PARTICULARS YOU SHOULD KNOW

1. Create an analysis report based on a thorough Internet search that discusses the tips, techniques, and best practices to protect against this type of amateur hacking.
2. Include a summary of the types of detection and prevention technology available, specifically the use of firewalls and intrusion detection software.
3. In your analysis report, include the current statistics on identity theft, the number of times networks are hacked, and the total annual cost of online security breaches to corporations.
4. During your research, you might also consider finding statistics on the percentage of companies that have yet to implement adequate security measures and the percentage of companies that spend 5 percent or less of their IT budgets on security for their networks.
5. File: Not applicable.

CASE 22: ASSESSING THE VALUE OF SUPPLY CHAIN MANAGEMENT

OPTIMIZING SHIPMENTS

One of the main products of the Fairway Woods Company is custom-made golf clubs. The clubs are manufactured at three plants (Denver, Colorado; Phoenix, Arizona; and Dallas, Texas) and are then shipped by truck to five distribution warehouses in Sacramento, California; Salt Lake City, Utah; Albuquerque, New Mexico; Chicago, Illinois; and New York City, New York. Because shipping costs are a major expense, management is investigating a way to reduce them. For the upcoming golf season, an estimate has been created as to the total output needed from each manufacturing plant and how much each warehouse will require to satisfy its customers. The CIO from Fairway Woods Company has created a spreadsheet for you, **FAIRWAYS.xls**, of the shipping costs from each manufacturing plant to each warehouse as a baseline analysis.

SOME PARTICULARS YOU SHOULD KNOW

1. The problem presented involves the shipment of goods from three plants to five regional warehouses.
2. Goods can be shipped from any plant to any warehouse, but it costs more to ship goods over long distances than over short distances.
3. The challenge presented is to determine the amounts to ship from each plant to each warehouse at a minimum total shipping cost in order to meet the regional demand, while not exceeding the plant supplies.
4. Specifically you need to focus on:
 - a. Minimizing the total shipping cost.
 - b. Total shipped must be less than or equal to supply at plant.
 - c. Totals shipped to warehouses must be greater than or equal to demand at warehouses.
 - d. Number to ship must be greater than or equal to 0.
5. File: **FAIRWAYS.xls** (Excel file).

BUREAU OF LABOR STATISTICS

The Bureau of Labor Statistics (BLS, at www.bls.gov) of the U.S. Federal government states that its role is as the “principal fact-finding agency for the Federal Government in the broad field of labor economics and statistics.” As you might well guess then, the BLS provides a wealth of information concerning employment and the economy. Connect to the BLS’s Web site and answer the following questions.

- A. What type of information is contained on the *Kid’s Page*? Did you find any of the information also suitable to you?
- B. What sort of information concerning workplace safety and illness is available? How is this information categorized? How would this type of information be helpful to a business manager?
- C. What type of demographic information is available? What “demographics” make up the key categories by which demographic information is provided?
- D. What is contained in the *Occupational Outlook Handbook*? How often is it updated? What parts of the handbook are particularly relevant to you as you prepare to enter the job market? Why?
- E. Within Inflation & Consumer Spending, the BLS provides a lot of information concerning consumer price indexes and producer price indexes. What is the consumer price index and what does it mean? What is the producer price index and what does it mean?
- F. What interesting statistics do you find when reviewing employment by state information? How is your state faring as compared to other states?

DEMOGRAPHICS

For organizations focusing on meeting wants or desires of end consumers, the demographic makeup of the target audience is key. The more you know about your target audience, the better equipped you are to develop and market products. Demographics is a broad general term that can include any characteristic such as zip code, annual income, gender, age, marital status, hobbies, and so on.

And you can find all sorts of demographic information on the Internet. Connect to a couple of different demographic-related Web sites and see what they have to offer. As you do, answer the following questions for each.

- A. Who is the target audience of the site?
- B. Who is the provider of the site?
- C. Is the provider a private (for-profit) organization or a not-for-profit organization?
- D. How often is the demographic information updated?
- E. Does the site require that you pay a subscription fee to access its demographic information?
- F. How helpful would the information be if you wanted to start a new business or sell various types of products?

FREE AND RENTABLE STORAGE SPACE

Information is an essential resource in the information age. You must ensure its integrity, know that it's useful, and always know that you have a backup of your information just in case your primary storage is damaged or stolen. To help, you can use the services of a file hosting service on the Web. These sites offer you storage of your information that can be accessed from anywhere in the world. You can use the services of these sites to back up your information and also create an environment in which you can share your information with other people.

A few of these file hosting services include My Docs Online (www.mydocsonline.com), Box (www.box.net), and Yahoo! Briefcase (<http://briefcase.yahoo.com>). Visit any of these sites and a few others that you find through searches and answer the following questions for each.

- A. Does the site provide free storage? If so, what is the limit?
- B. What type of information can you store (video, text, photos, etc.)?
- C. Can you establish multiple users with different passwords who can access your storage area?
- D. Must you sign a contract for a certain duration (annual, etc.)?
- E. Are there different levels of services provided such as personal, enterprise, workgroup, and so on?
- F. To you, is using a file hosting service on the Web better than backing up your information to writable CDs or DVDs? Why or why not?

GATHERING COMPETITIVE INTELLIGENCE

When considering new business opportunities, you need knowledge about the competition. One of the things many new business owners fail to do is to see how many competitors there are and what differentiates them before launching their business. You may find there are too many and that they would be tough competition for you. Or, you may find that there are few competitors and the ones who are out there aren't doing a terrific job.

Generate a new business idea you could launch on the Internet. (Perform this task in less than 15 minutes focusing on the products or services you will sell.) Now, seek out and look at some of the Web sites of businesses in the competitive space you're thinking of entering. As you do, answer the following questions.

- A. How many sites did you find that are offering the same products or services you're planning to offer?
- B. How did you find those sites?
- C. How many are in your country and how many are in other countries?
- D. Did you come across a site from another country that has a unique approach that you did not see on any of the sites in your own country?
- E. In general, has competition intensified because of the Internet and the Web? Justify your answer.

ETHICAL COMPUTING GUIDELINES

Ethical computing encompasses many topics: privacy, intellectual property, abuse of resources, character defamation, to name just a few. Unethical behavior can be as mild as rudeness in an e-mail or as lethal as stalking and death threats. Some unethical behavior is illegal, but not all of it is.

The Computer Ethics Institute Web site at www.brook.edu/its/cei/cei_hp.htm has a list of 10 commandments to guide the use of information technology and the Association for Computer Machinery (ACM) specifies a code of ethical behavior as do many other organizations.

Find answers to the following questions on the Web:

- A. Find a code of ethics from an organization of your choosing. What do you think are the best five guiding principles from all the tips that you found?
- B. Are chain letters good or bad? Are they illegal? Summarize the opposing arguments you find.
- C. How does anonymous e-mail work and why would you use it?
- D. What are five ways that e-mail use can be unethical?
- E. Why is the deliberate spreading of viruses unethical? Name at least five reasons.

EXPLORING GOOGLE EARTH

Google Earth is a free virtual globe program that uses satellite and aerial images combined with a geographic information system. It allows you to pick a place on the globe and zoom in to see all sorts of features like the locations of schools, sports venues, coffee shops, shopping malls, movie/DVD rental stores, etc. The list is very long.

You can even layer multiple searches and save your results. The site also hosts a large Google Earth Community that shares information and annotations.

The image resolution varies across regions, but most large cities around the world are depicted in high-resolution detail showing buildings and streets and trees and other features.

Download the Google Earth application from <http://earth.google.com> and answer the following questions:

- A. In the area where you live, how is the resolution compared to the resolution for Washington, D.C.?
- B. Can you see your own street? How about individual houses?
- C. Zoom in to your home county and mark elementary schools. How many are there? Less than 10? More than 10? More than 50?
- D. Choose a university location and zoom in. How clearly can you see the buildings? How about the cars in the parking lots?
- E. Can you find the Eiffel Tower in Paris, France; the Brandenburg Gate (Brandenburger Tor) in Berlin, Germany; and Buckingham Palace in London, England?

FINANCIAL AID RESOURCES

On the Internet, you can find valuable databases that give you access to financial aid resources as you attend school. These resources can be in the form of scholarships—money you don't have to pay back—and standard student loans. And there are a variety of financial aid lenders, ranging from traditional banks, to the government, to private parties wanting to give something back to society. Find at least three Web sites that provide financial aid databases and answer the following questions for each.

- A. Do you have to register as a user to access information?
- B. Do you have to pay a fee to access information?
- C. Can you build a profile of yourself and use it as you search?
- D. Can you apply for aid while at the site or must you request paper applications that you need to complete and return by mail?
- E. By what sort of categories of aid can you search?
- F. What about your school? What sort of searchable database of financial aid does it offer? How does it compare to the other sites you visited? Does your school's financial aid site provide any links to other sources of information? If so, what are those sources?

FINDING HOSTING SERVICES

There are many options for hosting services for e-commerce Web sites. You can decide to acquire the necessary computer and communications hardware and software to manage your own technical infrastructure, or you can let a specialist firm do it for you. Unless you're really into the technical side of things, it's probably better to work with a firm that specializes in it. They are called *Web hosting services* and there are plenty of them around. Cost, reliability, security, and customer service are some of the criteria you might use in selecting a hosting service. If you're planning to have your business located in a country with poor telecommunications services, don't forget that you can choose a hosting service located in a country with a more reliable telecommunications infrastructure, anywhere in the world.

Some companies provide directories that make it easy for you to find and compare prices and features of Web hosting companies, sort of like shopping malls for Web hosting services. An example of such a company is FindYourHosting.com (www.findyourhosting.com). Take a look at its site to see some of the options available. As you consider Web hosting services, answer the following questions.

- A. Compare the costs of the various hosting services. Were you able to find one that seems to be within a reasonable budget?
- B. How can you evaluate the reliability of various Web hosting services?
- C. How can you evaluate the quality of a Web hosting company's customer service? What do you have a right to expect in the way of customer service and also security?

GLOBAL STATISTICS AND RESOURCES

Thomas Friedman said it best: The world is flat. Simply put, we are one big group of people, no longer constrained by geographic borders, time zones, language, or even culture. To be successful in the business world, you must be willing to have international suppliers, international customers, and international business partners.

Therefore, knowing about specific regions and countries around the world is vitally important. Right now, regions such as the Pacific Rim are emerging as world economic powers. In 5 to 10 years that may be Central and South America or perhaps Russia. Beyond that, Africa may emerge. Within each of those regions, some countries are emerging more quickly than others.

Pick a country that interests you and also that you know little about. Connect to some of the global statistics and resources Web sites we've provided on the Web site for this book as well as any other sites you can find and answer the following questions for the country you chose.

- A. What is the current population?
- B. What are the primary industries and exports?
- C. What is the primary language?
- D. What are the country's natural resources?
- E. What population demographics were you able to find (e.g., gender ratio, birth and death rates, education, income distribution, etc.)?
- F. What is the country's government type?

GOLD, SILVER, INTEREST RATES, AND MONEY

Gold and silver have traditionally been kept as hedges against inflation and an uncertain future. Many people consider a rise in the price of gold and/or silver to be an early indicator of a slowing economy, perhaps leading to recession or even a depression.

During the first half of 2006, for the first time since 1981, when mortgage rates were 15 percent or more, the price of gold went above \$600 per ounce. The reason is said to be the falling price of the dollar compared to other world currencies. The mounting national debt and uncertainty about U.S. foreign policy were also contributing to a sense of insecurity about the future.

Analysts were concerned that for the above reasons, inflation would start creeping up, although the Federal Reserve was working to try and keep inflation low, since high inflation rates damage the economy in many ways. Find answers to the following questions on the Web:

- A. What is the current price of gold and silver? How does it compare to the price on January 1, 2006?
- B. What is the Federal Reserve's current interest rate compared to the rate on January 1, 2006?
- C. What is the current rate of inflation compared to what it was on January 1, 2006?
- D. What is the current exchange rate for the dollar compared to the British pound (£), the Euro (€), and the Yen (¥) today? How do these compare to the rates on January 1, 2006?
- E. What were all of the above values in the year that you were born?

PRIVACY LAWS AND LEGISLATION

Privacy laws in the United States tend to be aimed at specific industries, such as the video rental industry, or agencies of the federal government. There are also specific privacy laws that are passed on a state-by-state basis. For example, California has a law that requires companies that discover their databases have been breached to inform people whose personal information was included in that database. This law was passed to try to address the rising rate of identity theft.

Other industrialized countries have different approaches to privacy legislation. The European Union has issued a directive that all member nations enact laws to guarantee citizens specific privacy rights, but New Zealand has, perhaps, the most restrictive set of privacy laws.

Search the Web and find answers to the following questions:

- A. How did Choice Point, the Bank of America, LexisNexis, and DSW Shoe Stores contribute to the heightened interest of legislators in privacy laws?
- B. What are the major provisions of the European directive on the protection of personal information gathered by businesses?
- C. What are the pro and con arguments on the topic of the U.S. Homeland Security Act as it applies to personal privacy? List at least three points on each side.
- D. What are the main stipulations of the Family Educational Rights and Privacy Act (FERPA)?
- E. What is the main stipulation of the Freedom of Information Act?

PROTECTING YOUR COMPUTER

As you've no doubt already learned, anti-virus software finds, and may eliminate, viruses that find their way onto your computer or are trying to get into your computer system.

One method that anti-virus software uses is to examine the files on your computer looking for virus signatures, that is, content embedded in the files that matches a virus definition in its virus dictionary. Another method is to recognize when your computer is "acting funny" in a way that might indicate the presence of a virus.

The key to successful virus detection is in keeping the virus dictionary and the definition of "acting funny" current so that new viruses can be detected. To do this you must update your anti-virus software regularly. Most anti-virus software lets you set it up so that it goes to the Internet and updates itself on a regular basis. Find three sites that offer anti-virus software and answer the following questions:

- A. What does the software at each site cost?
- B. Does the site have information on current and past viruses?
- C. Does the site sell any other type of computer protection like a firewall or spyware protection? If so, list what's available.
- D. Does the site sell different software for a network than it does for an individual user? What's the difference?
- E. Does the software allow you to schedule automatic updating?

LEARNING ABOUT INVESTING

Investing can be as simple as finding a company that performs well financially and buying some of their stock. Or, if you want to spread your investment over a number of stocks and you don't want to select each stock personally, you can invest in a mutual fund. Of course, there are thousands of mutual funds with all types of investment objectives. So, any way you go you must pick your investment wisely. You can find many helpful Web sites on the Internet to get you up to speed quickly.

Choose three Web sites and answer the following questions:

- A. Is the site designed for first-time investors or those that are more experienced? Who sponsors the site?
- B. Can you search for a specific topic?
- C. Are specific stocks or mutual funds reviewed or evaluated?
- D. Does the site provide direct links to brokerage or stock quoting sites?
- E. Is a forum for submitting questions available? If so, are frequently asked questions (FAQs) posted?

LOCATING INTERNSHIPS

Have you ever noticed that a large number of jobs require expertise or experience? That being the case, how does someone gain relevant experience through a job when job experience is required to get the job? As it turns out, that has always been a perplexing dilemma for many college students, and one way to solve it is by obtaining an internship. Internships provide you with valuable knowledge about your field, pay you for your work, and offer you that valuable experience you need to move up in your career.

On the Web site for this text (www.mhhe.com/haag), we have provided you with a number of Web sites that offer internship possibilities—visit a few of them. For each site you visit, answer the following questions.

- A. Who owns and maintains the site? Is it a for-profit or not-for-profit organization?
- B. Do you find any internships in line with your career?
- C. What about pay? Do you find both paying and nonpaying internships?
- D. How do these internship sites compare to the more traditional job database sites such as Monster.com?
- E. What sort of internship resources does your school provide?
- F. How does your school's internship site compare to the other sites you visited on the Web?

SMALL BUSINESS ADMINISTRATION

The Small Business Administration (SBA, at www.sba.gov) of the U.S. Federal government has a goal of assisting almost 1.2 million prospective and existing small businesses in the year 2008, an approximate 22 percent increase over the 980,000 small businesses it helped in 2002. You can be among those 1.2 million small businesses, if you have the entrepreneurial spirit, an innovative idea, and solid business skills.

For existing small businesses, the SBA provides consultative services and loans for business growth. For start-up businesses, the SBA aids in finding capital, refining business ideas, developing a pro forma income statement, and a host of other activities. Visit the SBA's Web site and answer the following questions.

- A. What elements does the SBA require to appear in a business plan? What support does the SBA provide while you create your business plan?
- B. What tools does the SBA provide to help you in estimating your costs and revenues?
- C. While applying for a loan, what information does the SBA require that you provide?
- D. What educational services does the SBA provide so you can learn the basics of incomes statements and balance sheets?
- E. In what ways does the SBA support the creation of small businesses that are diversity-owned?

STOCK QUOTES

When you buy stock in a company, you're betting on its success. Although it's no guarantee of how the stock price will do in the future, most people look at the price of stock and how it has fared over previous months and years to get an indication of whether it's a strong buy or not.

Both stocks and mutual funds are offered by the share and you can buy as much or as little of the stock or mutual fund as you like. However, some stocks are priced at hundreds of thousands of dollars, and the price alone may take them off your list for consideration.

Choose three stock quoting services, examine what it takes to retrieve a stock or mutual fund quote and answer the following questions:

- A. Are the quotes provided free of charge or for a fee?
- B. Does the site require a ticker symbol (the abbreviation used by experienced investors) or can you type in a company name?
- C. Are the quotes in real time or are they delayed (15 to 20 minutes old)? Can you get price charts?
- D. Are prices charts available? How about historic prices?
- E. Can you create and save a personal portfolio of stocks?



RESEARCHING STOREFRONT SOFTWARE

If you decide to sell products on the Internet, there is software that you can use to make it easy to create a Web site. This type of software is called *storefront software*. There are many software products for you to choose from. Some will cost you a lot of money, but others are free. FreeMerchant.com for example, has a Basic Store for \$9.95 per month, a Bronze Package for \$24.95 per month, a Silver Package for \$49.95 per month, and a Gold Package for \$99.95 per month. What you get in each of these packages is listed in detail on the FreeMerchant.com Web site (www.freemerchant.com).

Since there are many options to choose from, it would be worth your while to do a little research to see if you can find an article that compares current versions of storefront software. A site like ZDNet.com (www.zdnet.com) would be a good place to start your search. Build up a list of features that you will need for your e-commerce site, and then compare your needs with the features offered by the various software packages. They all sound good when you read about them on the vendor's Web sites so be sure you take a "test drive" of the software before you sign up.

Another possibility would be to sign up for a shopping mall. Find your way to Amazon.com's zShops or Yahoo!Store and see that you think of these alternatives. Finally, you'll need a way for your customers to pay you for what they buy. This involves getting a merchant account which permits you to accept credit cards. Most of the storefront sites will explain how merchant accounts work and will help you get a merchant account.

- A. What features have you decided your storefront software must provide?
- B. How have you evaluated the pros and cons of using a storefront software package versus the options offered by the likes of Amazon.com and Yahoo!?
- C. See if you can track down users of software options you are considering. Send them an e-mail and ask them what they like and dislike. You may be surprised at their answers.

SEARCHING FOR SHAREWARE AND FREeware

Perhaps the notion of shareware/freeware appeals to you. You'd like to be able to try the software before you buy it. If you want software such as a screen saver or anti-virus software, you're in luck. But what if you want some shareware to help you compose music or keep track of your soccer team's schedule? Well, then you'll have to go searching for that software. You could use a general-purpose search engine such as Yahoo! and type in shareware and music or soccer. But suppose those few titles don't meet your needs.

Finding shareware/freeware titles can be daunting for two reasons. First, currently there are over 1 million shareware and freeware titles available to you. Second, most shareware/freeware developers don't have their own Web sites. As many don't develop their software as a business, they can't justify the cost of supporting their own Web sites. To address both of these challenges, Web sites have been created that maintain databases of thousands of shareware/freeware software titles. Find such a site and answer the following questions.

- A. How does the site group the software?
- B. Can you search by operating system or platform?
- C. Does the site provide descriptions of the software?
- D. Can you search by file size?
- E. Are screen captures from the software provided?
- F. Are reviews and/or ratings of the software provided?
- G. When was the last update for the site?

SEARCHING JOB DATABASES

There are, quite literally, thousands of sites that provide you with databases of job postings. Some are better than others. Some focus on specific industries, others offer postings for only executive managers.

Think for a moment about the job you want. What would be its title? In which industry do you want to work? In what part of the country do you want to work? What exceptional skills can you offer an employer? Connect to a couple of different job search database sites, search for your job, and answer the following questions for each site.

- A. What is the date of last update?
- B. Are career opportunities abroad listed as a separate category or are they integrated with domestic jobs?
- C. Can you search for a specific organization?
- D. Can you search by geographic location? If so, how? By city? By zip code?
- E. Can you apply for a position online? If so, how do you submit your résumé?
- F. Do you have to register to build an online résumé (e-résumé)?
- G. Once a potential employer performs a search that matches your résumé, how can that employer contact you?
- H. Once you build your résumé, can you use it to perform a job search?
- I. Are there valuable tips available for building a good résumé?

SEARCHING FOR MBA PROGRAMS

Many of you will undoubtedly choose to continue your education by obtaining an MBA. And you probably should. The market for the best business positions is extremely competitive, with hiring organizations seeking individuals who can speak more than one language, have job experience, and have extended their educational endeavors beyond just getting an undergraduate degree. Not too long ago, the key competitive advantage was in having that undergraduate degree, a true distinction over those with just a high school education. Now, the competitive advantage lies in having an MBA.

Each year, *U.S. News and World Report* ranks the top business schools in the nation. On the Web site that supports this text, you'll find a list of the Web sites for some of the top 50 business schools in the nation.

Choose a couple of different business schools from the list of 50, visit their Web sites, and answer the following questions for each.

- A. What business school did you choose?
- B. Does that school offer a graduate program in your area of interest?
- C. Can you apply online?
- D. Does the site list tuition and fee costs?
- E. Does the site contain a list of the graduate courses offered in your area of interest?
- F. Does the school offer some distance learning formats for some of the courses? Are you interested in taking courses via distance learning?