Introduction to Business

Third Edition

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Printed in the United States of America

Acknowledgments

The authors recognize the enormous value added to this innovative project by numerous project team members. Each member of the development team brought unique talents and strengths to the vision. The resulting vision was to create an introduction to business curriculum that was first, and above all else, for the benefit of the student. The main question driving the team was, "How do students learn?" We do not mean, how do they memorize for tests. But rather, how can we transmit information, knowledge and understanding so each student will exit the course having a strong foundation in business and in critical thinking which will support them in future course work and through life?

The end result is an electronic, globally interactive program of study, which allows the student to learn, experience, and feel what its like to be an entrepreneur and a manager within the global business community. We have sacrificed some knowledge content found in standard texts in order for the student to truly experience, understand, and appreciate the knowledge they have gained. We feel that the gain in understanding and the creation of a solid foundation in business is well worth the small sacrifice of rather minor information.

The total program experience that is provided should not be judged solely on this text. The experience should include taking advantage of the active learning component, the entrepreneurial strategic business simulation. The business that is started is simulated, but the negotiations and interaction with competitors and partners around the world is real business in real time. Students move from concepts in the text to a view of how real firms apply the concepts through application of that knowledge in the simulation. Enjoy the total experience, learn much, and prosper.

Thank you to all the collaborating professors who made this program possible and especially to the students that worked with the development team through two years of testing.

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Association Global View
A non-profit association benefiting students and their curriculum world wide

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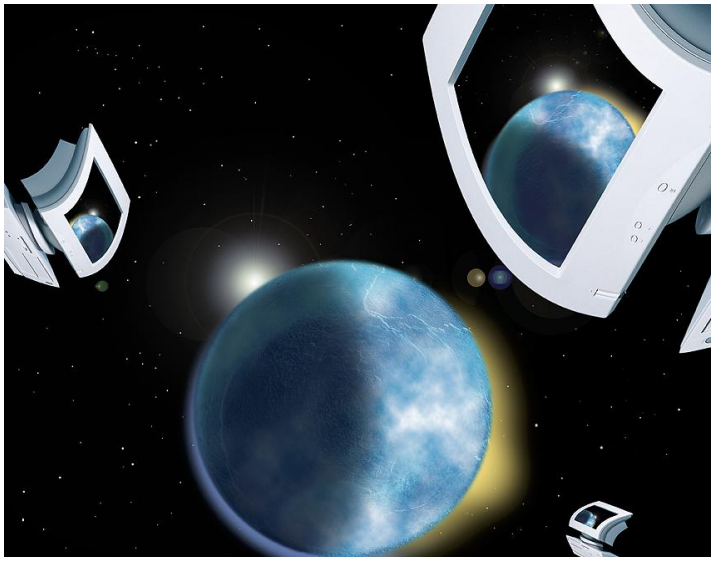
Overview



This chapter provides an overview of the program of study. It is important that you understand how the simulation is integrated with the information in the text. The text, although it has a great deal of valuable information, was not designed as a stand-alone book. The text is the starting point and guide for an integrated learning experience. You are not finished when you have read a chapter, you have only just begun to learn about the concepts and how they are applied by real firms and applied by you in the simulation.

OVERVIEW

There is little possibility that you would come to a true understanding of the new global business environment or the mind set of an entrepreneur simply by reading about it. Reading must be complemented by discussion, involvement, critical thinking, and most importantly, decision making.

The experiences you gain in this program of study will lay a foundation for future learning in business and in life. If a student of business covers all of the essential areas of study but misses the "feel" or perhaps, the anguish of making critical decisions, then that student will only partly understand what business is all about. Given the importance of business in our society, it is essential that each team member have a hands-on business experience. Welcome to the Global View challenge!

What to Expect From This Course

The Global View program is based on innovative, yet proven methods of learning. This course will be taught differently than most of your other courses. You need to know what to expect. You will have:

1. Standard lectures
2. Standard text material
3. You will actively collaborate with and compete against fellow business students across cultures.
4. You will learn and gain skills through practice in planning, launching and managing an international business in a simulated environment, contract negotiations, and global communication.

This program of study incorporates interactive and collaborative learning components in which you must take an active role. The educational value of this program is dependent on your being a partner in your own education.

This program requires that you become part of a team and start your own business. Running a business in the Global View simulation is the main driver of this educational experience. Although the simulation is FUN learning, it should be undertaken with seriousness. The steps needed to launch your firm are outlined below.

1. Create a team
2. Develop a process for decision making
3. File for incorporation (create a firm)

4. Decide whether you will sell Product 1 and/or Product 2
5. Determine if you will market in North America and/or Europe
6. Agree on how large a share of the market(s) your firm intends to control
7. Calculate how much capital (money) the firm must raise to be successful.
8. Manage your business over two simulated years (eight quarterly decisions are required).

Steps 1-3 are things you need to do now. Steps 4-7 are things you will do as you begin entering your practice decisions.

STEP 1: Create a team

You may be assigned to a team as often happens in real business firms. You may not like the arrangement and you may in fact not even like your team partners. That does not matter. What does matter is that you become a valued and effective team member. Determine very quickly what the team expects of you and how you can add value to the firm your team is managing. In most situations the following is extremely vital to your team's success and to your success in the team.

- Read the assigned text chapters in a timely manner.
- Share contact information with team partners, such as phone number and/or e-mail addresses.
- Arrange for at least one meeting time with team members per week outside of class time (for some teams it will be a virtual meeting that can be conducted over the Global View chat room system).
- Expect all team members and yourself to spend two hours outside of class per week reviewing assigned text chapters, practicing global communication skills, communicating with students around the world, and studying the simulation data and results.
- Be PROACTIVE. Do not sit back and wait for the team to teach you. Instead, contribute, communicate, volunteer opinions, be prepared for meetings and in that way, add value to your firm, your team, and your education.

STEP 2: Develop a process for decision making

Teams that act like committees often study things to death, get easily sidetracked with minor issues, and make decisions only because deadlines force them into it. Instead, it may be better for a team to act like executive decision-makers, having all members gather and share information, assigning responsibilities to individual members, holding members accountable, prioritizing issues, encouraging debate from all members and reaching decisions in a timely manner.

Developing a process whereby all members have responsibilities, are held accountable, and contribute to the team effort is crucial to the success of firms in the global business community and to the success of your team in the simulation. Developing the process your team will follow in making decisions is more important than the decisions themselves. A good

process consistently applied with all members participating will produce consistently good decisions.

Your team should spend time discussing and developing the decision making process as a specific task. Do not let one or two individual team members build the process around themselves or around a time frame that they personally like. You are a team. The members do need to compromise and accommodate constraints of individual members in developing the decision making process. In the end, the process should meet the needs of all members and achieve the needs of the firm.

STEP 3: File for Incorporation (create a firm)

Now that your team has been formed, your instructor will provide the firm number and password for your team. It is now up to your team to decide on the name of your simulated company and who will be in charge of communications for your firm (Communications Officer). Once your team has decided on a name and Communications Officer, send the information in an email to Kristi, your simulation administrator: globalview@earthlink.net

1. Firm number (use this firm number in communications with your simulation administrator)
2. Firm Name
3. Email address for the Communications Officer of the team. This will be the person your simulation administrator will contact with any necessary notifications.

Once you have supplied this information to the Office of Incorporation, you will receive a confirmation that your firm has been incorporated and established as a simulated corporation within the Global View Simulation. Once your firm is fully incorporated with Global View and all fees have been met, your firm will receive access to decision and contract menus as well as all reports within the simulation.

STEP 5: Select Product 1 and/or Product 2 to sell

Your firm will be operating in the Scent Industry. Within the Scent Industry there are two products that can be offered for sale to simulated retail store buyers: Product 1 is men's cologne, and Product 2 is ladies perfume. Your team must decide whether your firm will offer one or both of these products for sale.

You will have the ability to test products in the simulated markets during your trial (practice) decisions. We highly recommend you test both products in both areas. This way you can collect good research data on both products and how well they do in both markets.

Your team is not committed in the longer run to your decision on products. You can add or drop a product at any time. However, adding or dropping requires considerable effort in terms of creating marketing strategies and then spending money to implement those strategies. Thus,

adding or dropping a product line is an important strategic decision and should be considered very carefully.

STEP 6: Determine if the firm will market in North American and/or Europe

Your team will need to decide if it will sell in the simulated North American Free Trade Area (NAFTA) and/or in the European Union (EU). We highly recommend you sell both products in both areas in the trial decisions in order to gather information on which to make this decision.

Your team can start in one area and then expand to the second area. Or, it may stay in one area for the entire simulation. Expanding to or dropping from areas should be considered a major strategic decision and involve thoughtful debate by all team members.

Within each trading area (NAFTA or the EU), your small start-up firm will be servicing clients in a smaller regional area. You should view yourself as covering an area the size of Florida in NAFTA and the size of the Germany in the EU. Your competition for regional market share will be from up to 8 firms in your regional space. However, your competition for a measure of success in financial performance is from all firms in the introductory level simulation.

Real World Example:
Safeway Incorporated has competition in its NAFTA and EU stores from other retail food outlets. Safeway as a company must also compete against all large firms listed on the stock markets. The measure of success in stock price is to have its stock provide average or above average returns for its risk category to its stockholders. Your firm should never focus only on market share or only on stock performance. Top executives must be aware of both performance measures.

You do not select your region within a trading area. Your region is assigned to your firm. From day one of the simulation, all regions are made exactly equal in market size and potential. A region becomes unique because of the firms operating in that region and the strategies they develop. Competition over time will cause each region to develop unique characteristics.

STEP 7: Agree on how large a share of the market(s) your firm intends to control

In a market region with five competitors the average percentage of units sold by each firm in each decision period is 20%. However, some firms may elect to have high priced, high quality products and settle for a share close to 12%. Perhaps a firm will take a position in the regional market that will resemble a low price, high volume firm and seek 35% of the market. In general, firms that have high volume and low prices seek higher market shares.

The dream of every business, simulated or real, is to have a high volume, high priced product in the market with great market shares. Such an event is rare in simulated or real firms.

When it does happen, competitors eventually take your market share unless you can somehow keep them out. Businesses develop marketing strategies to compete for customers. Some firms also develop strategies to get rid of competitors or to keep them from even starting to compete in the market.

What share of the market is your team interested in controlling?

STEP 8: Calculate how much capital (money) the firm must raise to be successful

To sell product you must first purchase product. Your firm will place orders with manufacturers in the Advanced Global View simulation, contracting for your product to be made. To do this, you will need to communicate and negotiate via the Global View communication system, through chat rooms, posting boards, e-mail correspondence and online advertising from manufacturers. Once you have a contract to have your products produced, you will need to market the products by making pricing, advertising and sales representative decisions. Your clients in this simulation will be simulated retail buyers.

Thus, you need money to pay cash for the products that will be made for you. You will need cash to pay for promotion of your products. The more areas you sell in (NAFTA and the EU) and the more types of products you order produced (P1 and P2) and the larger your market share aspirations, the greater your need for capital (money).

The chapter on financing your firm will provide financial guidelines for your trial decision. The basis for your financial decisions is in your firm's strategies regarding products, market areas and desired market share. Thus, your team will need to discuss and define what your firm will look like once it is operating before you can make reasonable financial decisions.

STEP 9: Manage your business over two simulated years (eight quarterly decisions are required)

At this step, you will have completed steps 1 through 8 and practiced decision-making in your two trial runs. Your decisions in the first real run regarding products, areas, market shares and financing are critical decisions with long run implications for your firm. To assure high quality decisions are made at this critical point in time, your team's decision-making process should be well established.

Once your team is formed, review steps one through nine again. Make sure all team members realize the importance of having all team members participate in decision making, in sharing the workload and in being prepared. Each team member will need to read Chapter 3, on management. The information will help your team understand team strategy and team dynamics as the process of decision making in a team environment is created. The same chapter needs to be read a second time once you and your team partners have experienced intense decision-making in real time with real competition. Having experience and then rereading the team-building chapter will allow you to see the same subject matter from a new perspective.

The next set of topics will provide information about the environment in which your team and firm will be operating. In real firms and in simulated firms, many management teams become focused on day-to-day operations and decisions. Results of decision-making are often reviewed in terms of quarterly decisions creating results in that decision period. We caution you that such myopic and short-run styles of management are detrimental to your simulated firm and to real life firms in general.

1. Be aware of threats and opportunities in your global, national, regional operating environments as simulated economic and political events unfold.
2. Once you start up your firm you must keep it going. Each quarter follows the last. Poor decision-making will have cumulative effects as will good decision-making. You cannot expect to correct the effects of bad decision making in a final quarter effort.
3. Be aware when you receive your results that they do not reflect only your previous quarter's decisions. The results will show the impact of the previous quarter's decisions on the existing momentum of the firm and in relation to the changing competition caused by changes in competing firms.

History is important. Do not think that one set of decisions can suddenly change everything. Dropping your price below that of a competitor will not immediately, in one single quarter, completely restore your declining market share. If your competitor is increasing quality as you are decreasing price, you may find nothing changes. Not only is history important, but also the interaction of your entire integrated set of decisions and those of your competitors.

The Global View Simulation

The World Of Global View:

The Global View Simulation, like any sport or perhaps more like a good game of chess, consists of various components, rules, and opportunities that each player must be aware of if he or she is to achieve success on the playing field.

To begin, you must imagine the Global View Simulation as a microcosm, a world in miniature. There is an economy at work, a stock market, and a banking system. There are governmental laws, taxes, and political movements. There are laborers, agencies, competitors and business partners.

As you read through this text, consider what strategies your executive team might develop; decide on the structure and characteristics of your company. You are business entrepreneurs creating a company from scratch. Invent your firm.

Don’t limit your vision to a narrow and self-absorbed point of view. Your firm does not exist in a vacuum, but in the Global View world. This means that you have **competitors** working to defeat you, as well as **business partners** hoping to establish beneficial relationships with your firm. Many

of your colleagues won't be on your campus or even in your country. The simulation, in this respect, can provide you with a wonderful opportunity to experience international business first hand. Working with distant teams through e-mail or chatting with them in a chat-room can be rewarding to both the firm and the executive who undertakes the communication.

Along with the other participants in the simulation, you should be aware of the **Global View Administration**. The Administration runs the details of the game, allowing professors and students to concentrate on the learning process. The Administration can assist firms with questions about this text, chat-room software, or anything relating to the simulation such as decision entry, passwords, financial statements, lawsuits approved by your professor, and communications with other companies.

Product

Of utmost importance is your **product**. Without product your firm would lie idle until its initial monies drained away. There are two products a firm can sell. For simplicity they are called **Product 1** and **Product 2**. Product 1 is a low end (less expensive) product while product 2 is a high end product. What product 1 and product 2 are depends upon the industry your firm has been assigned. If, for example, your firm operates in the Scent Industry product 1 will be a premium aftershave and product 2 will be perfume. Know your product. What differentiates your product from that of another firm? Is it quality? Is it price? Is it the number of sales representatives you have promoting your product?

Within the simulation, product 1 and product 2 are bought and sold in units. A unit is a case of product, not a single item. The number of items in a case is not disclosed. The purpose for keeping this factor hidden is to keep students from allowing their knowledge of retail store pricing to influence their simulation pricing decisions. Thus, by dealing only in cases and not individual bottles we hope to focus your attention on manufacture price to you and your needed price per case to the retail buyer in order to make a profit for your firm.

Environment

Environment in the Global View simulation can be broken down into five elements: land, political situation, economic situation, markets, and administration. The first element is the **land**, the actual space your firm will occupy. In this simulation you have a wide choice for company location. You can locate near any city in **Area 1**, the **North American Free Trade Area (NAFTA)** or **Area 2**, the **European Union (EU)** including the Czech Republic. Your choice of corporate headquarters is of minor importance in the simulation. Since you have no manufacturing plant, it is assumed that you will store unsold inventory (product). You do not pay

rent or a mortgage on this storage space; you pay only an inventory carrying cost on units that remain at the end of the quarter. In this way your focus remains on the product.

The location of your manufacturer might be important. If they are in a politically sensitive area or one prone to strikes or labor disruptions your order for product may be delayed. Also, manufacturers have had delays in shipping due to hurricanes, earthquakes and other physical elements.

Political Situation

The second element, which makes up your environment, is the **political situation** in which you are operating. In the world of Global View, politics can affect your firm directly or indirectly. Stay informed about politics in your area. Read the news, which is published quarterly, to keep current. New trade laws, labor or environmental regulations as well as general industry news can have an immediate impact on your firm. Even though your firm won't have production facilities, the manufacturers you buy from do. Any increase to your supplier's cost of production due to a political event will inevitably mean the price you pay for product will be higher.

Take preventive action when possible. Read your e-mail and check for administrative messages in the "Industry" section of the "Dollars and Scents Quarterly" so that you can take advantage of possible solutions being offered to dangerous political situations. These could be anything from an opportunity to vote or communicate with a labor union leader, to an offer for relocation or fire insurance.

If you want to take a course of action, but don't have the option to do so in your central decision set, or through special offers from the Global View Administration, ask for help. Don't feel boxed in by the decision set. Explore your options.

Economic Situation

The third element of your Global View environment is the **economic situation** in which you are operating. The macro-economic movements within the game are the same for all firms. Everyone, regardless of location, is affected alike by the Global View economy.

You can follow economic trends, trying to predict what lies ahead by reading the economic section of the news as well as by tracking certain figures on your industry reports such as the Bear/Bull market index and the economic indexes for the coming quarter and for the coming year.

The EURO will be the currency used in the EU (Area 2) for pricing. All other figures are in U.S. dollars. The strength or weakness of the Euro Dollar or the U.S. dollar and the reason for

its relative fluctuations will be explored in the news. You can track the EURO in the industry reports for your region. Details of the EURO will be discussed in a later chapter.

The economy will be affected by political and environmental factors that develop, just as politics and international policies will, at times, follow economic movements, as it does in real life.

The Markets

The **markets** in which your firm will sell product make up the fourth element of your firm's environment. There are several markets in the Global View simulation. The consumer market is supplied by retail stores. The retail store market is supplied by distributors. (Your firm is a distributor - retail stores are your market). Distributors are supplied by manufactures in the wholesale market (you will order product from manufacturing firms operated by advanced student teams). The **consumer market** is made up of two regions, the NAFTA market and the EU market. Simulated retail store buyers in the NAFTA and EU market areas purchase finished goods from your firm and other Global View firms, for end consumers.

The **wholesale market** as in real life, refers to the trading taking place between manufacturers and distributors. However, trading between distributors and retailers is also often referred to as the wholesale market. Thus, when someone discusses "wholesale prices or wholesale volume" you will need to seek clarification about which part of the wholesale market they are referring to.

Because your firm does not have production facilities (a factory) you must contract with a manufacture to produce your products. By entering into contracts with manufacturing firms, you can buy products, which you will resell to the retail store market. The demand for your product from retailers depends on the simulated consumer market. Your firm will not have contact with end consumers, only with the retail store buyers who in turn sell to the end consumer.

Administrative Entities

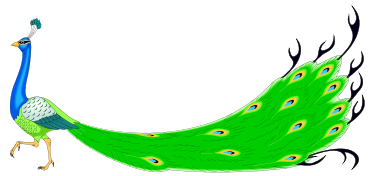
The fifth and final element of your environment is the **administrative entities** working within the simulation. There are two, in particular, which you should be concerned with. The first is the **Global World Bank.** The Global World Bank sets monetary policy, which directly affects the cost and availability of money. The bank also conducts periodic audits and works with firms that are headed for bankruptcy.

As firms get too far into debt, the bank grows uneasy. In this simulation, the bank will run frequent audits and demand that you bring your debt down to a reasonable amount.

What can the bank do? The bank can call your loans and cancel lines of credit if it becomes frightened by the way you are managing your firm's finances (similar to closing or

restricting your personal credit card account). The bank may opt to move your term loan to a special loan, which has an annual interest rate of 36%, YIKES! When you are bankrupt, the Global World Bank will seize your assets on behalf of all creditors and force your firm to operate under a particular set of rules or force your firm into bankruptcy.

On the other hand, the bank can be a great friend and assist firms, which have encountered a terrible financial problem, or have become bogged down with the weight of interest from a special loan generated through a careless mistake. If you are having financial difficulties, appeal to the bank and see what they can do to help.



The other main administrative entity in the Global View World is **Peacock Industries**. Peacock Industries runs a Firm identified by firm number 18. Peacock's primary function is to act like a manufacturer and sell finished goods to companies in the simulation.

Peacock Industries does not act as a retail store buyer. Peacock is a government funded firm and thus politically sensitive. It can only operate in the manufacturer-to-distributor or wholesale market when there is a critical shortage of manufactured products for sale. Prices are high and fixed (that is, prices cannot be negotiated as they are with private manufacturing firms.

You will purchase product from Peacock in your trial decisions. This will allow you to experience entering contracts. Even when you are entering trial decisions, you should have team members communicating with manufacturers for the day you make your first set of real decisions. Do not hesitate to talk with manufactures far in advance of actually ordering product for the coming quarter.

Peacock can usually supply your full order for finished goods, but the prices of their products will go up and almost certainly continue to climb higher throughout the simulation. The current price for Peacock products can always be found in the quarterly news. Political pressure almost always forces Peacock to stop supplying product or to charge very high prices. Do not become dependent on Peacock simply it is an easy way to get product. You run very significant risks if you become dependent on Peacock as the supplier of your products.

To buy finished goods through Peacock Industries, you simply enter a contract using Peacock's firm number as the supplier for product. It is easy, expensive and high risk regarding long term availability of product.

Information Sources

Where do I look for the information I need?

❶ The Simulation:

- To enter decisions
- To enter contracts
- To view the list of current contracts involving your firm
- To review and print market group reports
- To review and print firm reports
- To view stock performance

❷ The Message Board/Chat Room System:

- To post messages to stockholders
- To post requests for product
- To negotiate contracts
- To view messages from other firms
- To view messages from GV Admin
- To participate in online tutorials
- To chat with senior mentors

❸ Global View Web page:

- To access the simulation -- decision/contract entry and firm reports
- To access The Message Board/Chat Room System
- To view the Frequently Asked Questions list
- To view the Introduction to Business program page updated weekly by your simulation administrator
- To view the chapter links
- To view the simulation news
- To view unique reports when available

The Global View Matrix

The Global View Simulation is a matrix (or related set) of participating firms. This is how it works. There are a series of **market groups** each with its own region. Market group 1 may have up to eight firms and is in region 1, which has regional markets in both NAFTA and the EU. There are many regions perhaps as many as 30 or 40 depending on the number of firms

participating. Your firm will be assigned one of eight firm numbers possible in each market group. Thus, your firm can never have more than seven direct competitors.

Following is a table, which shows market groups 1-4, and the maximum group of 8 firms that can operate in each market region. The number of the market group plus the number of the firm in that market group is the firm number assigned to your firm. For example, if you're in market group 1 and you are firm 1, you would be Firm 11. Use this number to identify yourself to other firms in the simulation and to the Global View administrators. If you want to contact another firm, say in Market Group 12, and that firm's number is 6, then you would contact firm 126.

Within your market group your firm can sell into your regional market in NAFTA and/or into your regional market in the EU.

The Global View Matrix

	Market Group 1	***Market Group 2***	***Market Group 3***	***Market Group 4***
Firm 1	Firm 11	Firm 21	Firm 31	Firm 41
Firm 2	Firm 12	Firm 22	Firm 32	Firm 42
Firm 3	Firm 13	Firm 23	Firm 33	Firm 43
Firm 4	Firm 14	Firm 24	Firm 34	Firm 44
Firm 5	Firm 15	Firm 25	Firm 35	Firm 45
Firm 6	Firm 16	Firm 26	Firm 36	Firm 46
Firm 7	Firm 17	Firm 27	Firm 37	Firm 47
Firm 8	Firm 18	Firm 28	Firm 38	Firm 48

*** Firm 11 - 18 is selling product within the same market region but not to the same market region as firms 21-28, 31-38, 41-48, etc.. Each market group has its own market region that firms from other market groups can't sell to.**

Each market group operates within a defined type of industry such as the Scent Industry. The industry selected will be the same for all firms in the simulation.

Time

Time in the Global View simulation is broken down into quarters. There are, of course, 4 quarters per year. Quarter 1 begins in January and includes February and March. Quarter 2, would pick up with April, May, and June. Everything will follow the quarterly tick.

All teams must submit a set of decisions each quarter. The actual starting year (2000, 2001, etc...) will be stated at the beginning of each simulation. The simulation will generally run for 3 to 4 years (your firm will only make competitive decisions for two years). Each quarter builds on the previous quarter, creating an accumulated history for your firm.

...And Seasonality

There is another important consideration when looking at time in the Global View Simulation, the concept of seasonal demand. In the simulation a firm can resell 2 different items, product 1 and product 2. Each of these products has a quarterly seasonal pattern in which demand and thus, potential sales changes..

There may be a tremendous demand for product 1 in quarter 2 (the months of April, May, and June). Likewise, product 2 may have terrible sales in quarter 3, but excellent sales in quarter 4. The quarterly seasonal patterns are well established and can be viewed on the Global View web site. Your firm must be aware of seasonal demand from the consumer market prior to placing an order to purchase product from a manufacturer.

A Quick Note on The Message Board/Chat Room System or E-mail:

It is important that you immediately start to use the electronic communication system for discussions, meetings, chats and negotiations. All online communications including chat-rooms, you must follow certain codes of conduct. When you send messages to other firms, remember that you are representing your firm. The tone and content of your messages should be professional.

If using private e-mail instead of The Message Board/Chat Room System, make sure you have identified your firm by both name and number at the start of the message. This will allow the receiver to identify the firm. Simply the "sender" header in the message cannot identify the firm if private e-mail is used.

Global View Administration, will not forward messages for your firm. Send messages directly to the firm in question. This will quicken the response time and establish better lines of communication between your firm and the firm(s) you are working with.

Chapter 2

The Global Business Environment

Chapter 2 will challenge you to define the definition of business. Ultimately, it is your perceptions that will create the definition. Farther into the chapter you will again be challenged to think for yourselves as you examine your country's political environment and decide where it is currently positioned on the CC Scale.

THE GLOBAL BUSINESS ENVIRONMENT

What is business?

Authors of competing introduction to business texts will not agree with our definition of business. They will argue that **business** should be defined as *an activity, which provides society (or others) needed goods and services at a profit*. How would you define business? Before you accept the standard definition, pose these questions to yourself and others:

1. The definition above states that a business engages in selling "needed" goods to society. Is this always true? Is there a difference between something needed and something wanted? Do people need and want things based on their own value system or do businesses create needs and wants through advertising? Are cigarettes a need, a want, or a business created desire?

2. What about illegal goods? Society in general doesn't want marijuana to exist yet we have people that sell it at a profit to a segment or target group in our society who desire it. Is something not a business because it sells illegal goods?

3. Is business always conducted to turn a profit? Some entities sell but not with the objective of earning a monetary profit. The Democratic and Republican parties in the United States sell candidates to the American public. The objective is not an immediate monetary profit but a gain of power and influence. Do you agree that the selling of a candidate and a political party's ideals are a type of product or service?

4. What about **non-profit** organizations? Some organizations are designed to provide goods and services to members of society but not for a profit. When a local restaurant opens and makes a profit, it pays taxes and retains part or all of the after-tax profits in the business. The increase in the firm's assets (such as cash or restaurant equipment) is listed on the books of the company as having come from **retained earnings**. The firm will often reward those who made the business successful with higher salaries or bonuses in addition to retaining some of the profits to expand the firm. If a local non-profit hospital makes excess money, it doesn't pay taxes on the profit, it simply retains the entire amount as a surplus. Similar to the successful restaurant, the hospital will also reward the people that made it a success with higher salaries or bonuses, and/or use its surplus retained money to expand its services. Do you agree that in many situations, the only difference between achieving a profit in a business and achieving surplus earnings in a non-profit business is that one pays income tax and the other does not?

There is another important difference between profit seeking firms and non-profit organizations such as political parties or community-sponsored hospitals. Profit seeking firms have owners. Non-profit firms have a governing body so no one "owns" the firm. Ownership is of key importance in many aspects of a for-profit business. Of course, for-profit and non-profit businesses have much in common. Both profit and non-profit businesses must seek start-up **capital** (money to buy inventory, machinery, ambulances, fixtures, etc.). Both types of organizations are held accountable to the individuals or groups that provided the start-up money. Both must seek continual **revenues** to stay in business. All profit firms must find a service or product that the market will purchase. Non-profit businesses must do the same and/or appeal to donors in order to stay in business. Non-profit businesses are sometimes faced with the interesting, dual marketing problem of how to provide services or products to meet a need while simultaneously convincing a second market (donors) that they should provide funds. Consequently, non-profit businesses must carefully monitor two very different markets (the benefactors of the service or product and the donors).

Consider the additional information regarding for-profit owners and not-for-profit governing boards. In defining "What is a Business" should a distinction be made between for-profit and not-for-profit businesses?

Risk and Return:

The knowledge you will gain about business in this course can be applied to almost all organizations and institutions in the world. By our definition, they all have one thing in common. A business is an enterprise where the owners, boards or managers take risks in order to make a profit, gain excess earnings, secure power, influence the lives of others, gain prestige, or insure self-preservation.

This is what business is about: ***Taking a risk in order to gain a return*** **(risk and return)**. If you take a risk expecting on average to lose it's called gambling. If, on the other hand, you take a risk expecting on average to gain it's called an **investment**.

In order to join in a discussion on the definition of business, reflect on what a business is. Determine for yourself if it is *an activity, which provides society (or others) needed goods and services at a profit*. Or is business better defined as *taking risk in anticipation of a gain*? Your instructor may require a written definition of "what is a business?" to be posted on the The Message Board/Chat Room System bulletin board.

Incorporation

A governmental authority administers incorporation. In the United States, incorporation is a state process, not a national or federal process. States have varied incorporation requirements with some states being pro-business. Other states seem more interested in protecting investors and keeping a close watch over firms rather than making it easy for businesses to incorporate. Incorporation is not a complicated process even when states are not pro-business nor is it expensive.

Why do businesses **incorporate**? Once incorporated the firm assumes the legal status of an individual. This provides the owners or executives personal protection. If, for example, a firm makes a serious mistake or an accident occurs a lawsuit may result. The

lawsuit will be directed at the corporation rather than the owners and managers. In some cases, where there was intent to do harm or prudent decision making was not used, certain officials in the corporation might be included in the lawsuit.

With legal protection provided, **stock investors**, are more likely to write a check to the firm and become part owner of the business. When the investors want to get out of the business the legal protection through incorporation makes it easier for the original investor to find a new investor that will write a check for the stock. It is important that you note the firm only receives money from the original sale of stock and is not involved in the future resale or exchange of the stock between investors.

Investors also like the idea that if one investor has personal, health, legal, or financial problems, it does not directly affect the firm. Each investor can exit when they want to simply by finding some new investor that will buy the stock from them. The new investor assumes the same rights of the investor that sold the stock. Therefore the remaining shareholders do not care who holds the shares of stock.

Other forms of business ownership are often used. A person or a husband and wife might start a business by taking out a business license from their city, county or provincial government agency in charge. Sole proprietorships are very easy to start and are often done for small sized businesses. However, proprietorships do not provide for additional owners to join and supply management talent and/or additional funds.

If the business needs more than one owner in order to get the needed funds or human resource assets (programmer, mechanic, ER medical doctor, etc.) then a partnership form of organization can be set up. Partners can join by adding capital and/or talent. While excitement of working with a partner overcomes many team management problems, eventually most partnerships refer back to their legal partnership agreement to settle disputes.

Legal advice should be sought to make sure the partnership agreement would cover many situations that are often overlooked as a partnership is formed.

Another benefit of corporations over **sole proprietorships** and **partnerships** as a legal business **entity** is that individual investors can sell their interest in the firm (**shares of stock**) without disrupting the firm itself. Thus, if investors become irritated with the firm's performance or they need money quickly they can sell their stock to another individual. The corporation does not repurchase the stock. Thus, ownership continues to change but the corporation maintains the funds from the original sale of stock and the management team stays intact.

Think of it as General Motors selling you a new car. GM has your money and you have the car. When you sell your car, GM does not repurchase it. Instead, the sale will be made to a car dealer or a private party.

When investors decide to sell their stock, they can advertise the stock in the classified advertisement section of a newspaper. It is rare, but sometimes that is the only method to find a stock buyer if the company is a little, regional firm. Selling the stock of small, regional firms is a difficult process since buyers cannot be easily located. If, by luck, a buyer is found, determining the value of a share in a business is not easy, even when both buyer and seller bargain in good faith for a fair value. It is difficult to come to an agreement over the price of an automobile, which is tangible and is parked right in

front of the buyer and seller. How much is a piece of paper worth that has rights to partial ownership in a business?

A system has been developed to facilitate the buying and selling of "used" stocks. There are famous names in the business of bringing stock buyers and sellers together such as the **New York Stock Exchange (NYSE)**, the **American Stock Exchange (AMEX)** and the **National Association of Securities Dealers Automated Quotations (NASDAQ)**. Before one of these large stock exchanges will handle the resale of stock in a firm, that firm must have achieved some positive investment reputation. The firm must have enough shares and numerous **stockholders**, such that every day one could expect buy and sell orders for shares of stock.

The process of examining a firm to see if it meets the requirements for active trading in the large stock exchanges is called **listing**. If an exchange determines that the volume of trading will generate sufficient revenue for the exchange and, that the firm agrees to make certain financial data public, the stock is listed.

Having a stock "listed" or traded allows the investors to quickly and easily find a buyer for their stock. The ability to change an asset, such as a stock, quickly into cash without having to lower the price is called **liquidity**. Cash is the ultimate in liquidity. Stock on a listed exchange is quite liquid (you might take a loss on what you paid for it, but you will get the cash for what it is worth that day). A non-listed stock like a used car is less liquid. A home is generally a great asset but is not very liquid. Depending on the market, homes might turnover (sell) in three months but in some years it might take 12 months or more. The more liquid the asset, the easier to take care of adjustments in your personal life and the easier to move from one investment to a better one. Liquidity provides options.

Entrepreneurs And Their Environments

Entrepreneurs are the future. Citizens need to influence their governments to create a “user friendly” environment so ideas of creative individuals can evolve into new products and services. The legal system must provide some protection for start-up business ventures that succeed and also provide some safety net for the many entrepreneurs that certainly will fail. What type of economic environment will keep an economy moving into the future?

Individuals throughout the world start businesses. As you are reading this someone, somewhere is preparing for opening day. They may be accepting delivery of their first box of lettuce for a new restaurant or perhaps posting the last graphic to their new online store.

Perhaps you are considering starting a business or expanding one yourself. Within this course you will have the opportunity to begin a business in a simulated business environment. What questions do you need to ask about starting a real business and a simulated business in this course? Where and who can you turn to for help?

The degree of ease in starting a business is determined in part by the area in which you will operate. Towns, cities, counties, states and nations all differ in the degree to which they will assist **entrepreneurs** (those who start businesses). Each governmental

body over time has developed an "attitude" toward business in general and have policies directed toward specific types of business operations.

In the United States, small businesses are extremely important. Most jobs and many innovations are provided by small businesses. New job employment, are most often created by small businesses. Entrepreneurs attempt to commercialize new ideas or concepts and thus bring new products and services to the **consumer**. They keep the **economic environment** vigorous. Many societies depend on entrepreneurs to sustain growth since they often assume risks that larger and more established firms are not willing to consider. It would appear that as firms become successful and rich in terms of **assets** (cash, equipment, etc.), they are less willing to assume large risks. Their tolerance for assuming risk in the pursuit of gain diminishes as wealth is accumulated.

It is understandable that a firm with large resources would not want to take on a large-scale project, which required the assumption of considerable risk. But why wouldn't a large firm attempt a little project, which would have minimal impact in the case of failure? Consider whom they would put in charge of a small project? Not many executives have the breadth of knowledge or skills needed to handle all the aspects of running a firm. When executives and managers within a larger firm face complex problems that go beyond their area of expertise. They turn to a specialized support staff. Small-scale business ventures cannot afford to staff specialists in all fields.

In the arena of starting small businesses, entrepreneurs are unique individuals that have an edge over executives and managers from larger corporations. That edge is the ability to tolerate more risk, take on more encompassing problems, make decisions with less knowledge and harness the drive and commitment that comes from being an owner.

Because of the value added to society by small business, governments at different levels have established small business programs.

The Simulation Environment

In this course, you and your team will create and operate a simulated business. The simulation has a business environment with competing firms, a political, and an economic environment.

Business Environment:

The business environment in the simulation will have your firm operating as a distributor of your own product. You will have the product made for your firm by a manufacturer. Your firm will then sell the product to retail stores.

Your firm will be contracting for your private labeled products with manufacturing firms located in specific political and economic environments. Seniors and graduate students at the Advanced level of the simulation operate the manufacturing plants. (They supply finished goods to your firm, but do not compete in your markets.)

Private labeling means you have a legal right to the product's brand name, but you contract with a manufacturing firm to produce it for you. In the simulation you will need to create names that will be used for the product(s) your firm will be selling. Then you must locate a manufacturing firm and negotiate a contract with them to manufacture the products and paste your firm's label on it. The manufacturer will deliver finished

goods to your firm. Your team will then market the product in your competitive market region.

Association Global View staff will provide you with information about available manufacturers and how to contract with them. You will find this information at the Global View web site on your Introduction to Business program page.

Political Environment:

Since manufacturing firms and your firm share the same political and economic environments, you can assess how risky it is to sign a private label contract with a firm located in a politically volatile area versus a firm located in Kansas City, USA or Paris, France. It is important that you read the news released each quarter to find information about the political and economic forces affecting the manufacturing firms you will be contracting with. Mexico City, for example, could experience an earthquake that might limit production for the firm's manufacturing product. A firm located in the Czech Republic could experience a trucking or rail strike prohibiting products being shipped. A firm located in the North Eastern U.S. could experience a power shortage that would limit production.

There are innumerable risks, (as in real life) which could affect the firms with whom you are doing business. The wise executive team will take into account, all factors, both political and economic, when deciding which manufacturing firm to do business with.

Economic Environment:

In real life and in the Global View simulation, the economy is highly intertwined with the political environment. At times the political environment is spurred by the current economic conditions. Other times, economic phenomenon occurs as a direct result of some political action. Be sure to read the quarterly news released with the results of each decision set to view the ever-changing economic environment and the forecasts for what the future holds.

Choosing A Firm Location

The environments in which your team will operate, (business, political, and economic) start with two major sub-environments. The sub-environments are major trading areas formed by countries agreeing to "free" trade or at least to reduced restrictions on movement of goods, services, capital and labor. This is accomplished, for example, by reducing **tariffs** for partnered countries.

The two markets used in the simulation exist in real life. They are NAFTA (North American Free Trade Area) and EU (European Union). You may find in reading books and articles a few years old that the EU was then referred to as the EC (European Community) or EEC (European Economic Community).

The formation of large-scale economic trading areas has stimulated economic growth in the shorter run. In the longer run industrial production seems to be moving to areas of lower cost production within the defined trading area. Small shops and inefficient delivery systems are at risk as large, powerful corporations spread over the

trading areas. Large-scale banks are taking over or destroying smaller local banks. Large-scale grocery stores are destroying the smaller and higher priced local butcher shops and green grocers.

Forming multinational giant trading blocks where products, labor and capital can move with few restraints has little immediate effect. However, in the very long run it will very likely:

1. Stimulate the economies involved;
2. Move production and people to specialized areas of production; regardless of national boundaries;
3. In a very subtle but powerful manner, alter the cultures and cultural values that previously existed in each of the separate states now a member of the trading area.

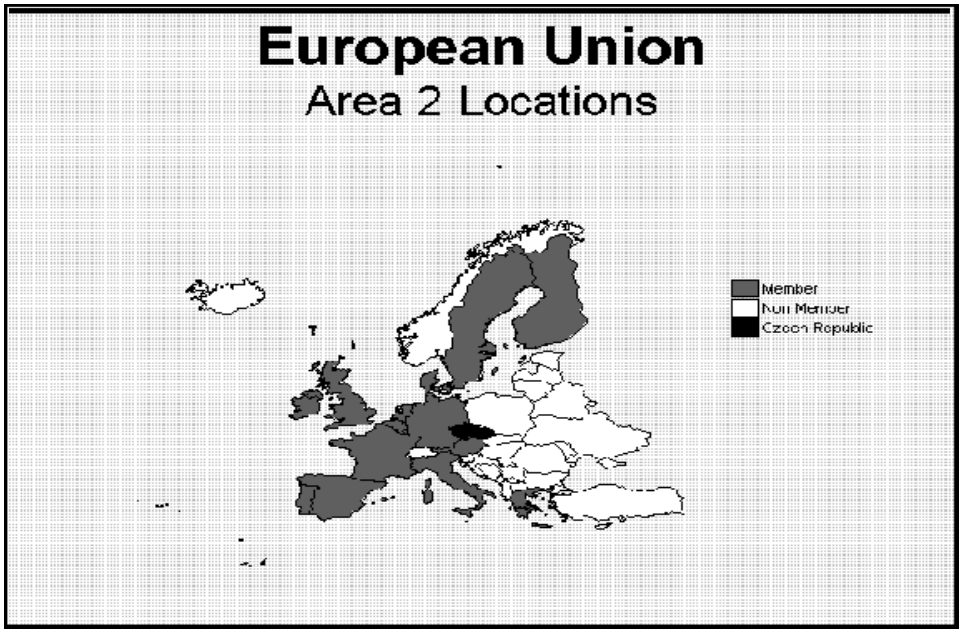
If you live in NAFTA or the EU, what has been and what will be the impact of the trading area on your country's culture? What coverage has the media given to issues related to the opening of free and reduced trade areas? What position have the various political parties taken on these issues?

If you live in China, what is the impact of opening trade relations with major trading partners? If you live outside a major trading area, will your nation's businesses be able to compete with the giant powerful firms that are forming inside the major trading areas - how soon will those powerful firms be operating directly in your country?

Trading Areas Within the Simulation:

In the Global View simulation, you should have already selected a country and a city within that county for your firm's corporate headquarters. Your firm can sell in both areas regardless of the one city selected as the firm's headquarter site. The maps presented below are real life trading areas. The simulation has nicknamed them Area 1 (NAFTA) and Area 2 (EU), abbreviated as A1 (Area 1) and A2 (Area 2).


North American Free Trade Area
Area 1 Locations
member
nonmember


European Union
Area 2 Locations
Member
Non Member
Czech Republic

Local Political Environments

What if you wanted to start a plastic manufacturing plant, a sawmill, a bar or a strip club in a certain city? Do you think the same location incentive offer would exist? Much like a socialistic government, city planners and elected officials will attempt to interrupt the free market system in order to exclude or limit certain businesses to special areas. They might say, for example, six bars in the downtown area is enough and they don't want yours. They might attempt to keep you out through their power to license firms and zone property for specific uses.

The attempt to exclude strip clubs, limit the number of bars and ban chemical operations through zoning laws seems to run counter to a **free enterprise system**. Government bodies, acting in the assumed best interest of the general public, restrict a host of economic freedoms. Thus, a new firm must carefully consider the local political environment before committing to a project.

Global Politics

If you are looking for pure **capitalism** in which individuals decide everything according to the **supply** of **and demand** for goods and services in a free market, don't waste your time. We do not believe it exists. Perhaps such a system existed in ancient times, but certainly not today. What we have today is a sliding scale between non-existent pure capitalism and non-existent pure **communism**. In between the two extremes, societies in each nation have determined, or have allowed some group to determine, how wealth will be created and distributed.

In the more capitalistic systems, business firms react by supplying products and services to meet the needs of other firms, the government and consumers. The system appears to operate in chaos, with some firms duplicating what others are doing. Firms in such a system attempt to eliminate competing firms through superior products or lower prices. There are firms that succeed and firms that fail. Those individuals that succeed become rich and powerful, commanding a large amount of the resources in that society. Individuals in the same society that do not attempt to start a business and the owners of firms that attempted to start a business but failed, work for owners who succeeded. The discrepancy between those with wealth and those without wealth can become extreme in this pure capitalistic environment.

Creating a system where individuals make the decisions and firms compete, results in duplication of effort and an extraordinary number of failures. The cost to embrace capitalism in monetary terms, resource terms, and human terms is indeed staggering.

Communism espouses job security, efficient use of resources, equality in the distribution of created wealth, and almost no failures. This system attempts to achieve

extraordinary efficiency through central planning with all wealth-creating resources owned by the government. There is no competition. The government determines what, when, where, and who will produce the goods and services to be delivered to society.

A third system, closer to communism than capitalism is called **socialism**. In socialism, the government owns, and through **central planning**, controls key industries within the economy. Key industries might be auto, steel, and energy production. Also included might be communication and transportation. The idea is to let private enterprise handle the smaller, less sensitive products and services while government runs the more important industries.

Economies At Work:

Karl Marx was the intellectual theorist who, through his writings, made communism appear to be a sound economic system. Russia, and eventually many other countries, put the plan into action. Today, communism in its purer forms is recognized as a failure. Governments around the world, including yours, are now sliding up or down on the scale between the two failed extremes of capitalism and communism. Let us call it the "CC Scale" (capitalism to communism). It is important to understand why communism failed and why capitalism in its pure form also failed.

Communism failed because it destroyed individual initiative. The notion of providing to each citizen according to his or her needs was well received by many. The idea that each would produce according to her or his ability, however, began to wear thin since rewards were the same despite the imbalance of work efforts. Thus, individual initiative and hard work were brought down almost to the lowest common denominator.

Central planning also had a hand in the failure. Even if goods were distributed evenly, central planning on such a grand scale was not efficient. In capitalism, when mistakes are made, a business unit fails. Since business units are so numerous, there is little damage. In central planning, when a mistake is made the entire system may experience severe problems.

Do you agree with this statement? "Eventually, even with the best of intentions, an economy based exclusively on a central planning system will fail."

The inherent flaw in pure capitalism is not much different than in communism. Pure capitalism will eventually produce a small and extremely rich group of individuals that own most of the important wealth creating resources in the society. That small yet very powerful group of business owners will attempt to exclude newcomers from competing in their industries. They will establish laws and regulations to preserve their position in the society. Thus, pure capitalism without control eventually results in severe limits on the economic freedoms of most individuals in that society. Innovation and dramatic technological change is seen as a threat to the small and powerful controlling group of business people.

In both extremes of pure communism and pure capitalism, it would seem that the society and individuals in that society eventually fare poorly. If neither pure communism nor pure capitalism is satisfactory, where should a society position itself? We boldly suggest that there is no permanent optimum position. The best mix of economic systems depends on what the society needs at the time.

If the nation is facing a military conflict or a natural catastrophe, more central planning is needed to direct resources from consumer consumption into military or emergency use. If a society needs more wealth created, lowering taxes and restrictions while increasing business incentives could encourage **private enterprise**. If the society has an extreme poverty problem, programs to encourage business and increase taxes on wealthy individuals may be put into effect. This wealth is then redistributed through welfare programs to the poor. Carried to the extreme, taxing the rich to take care of the poor will destroy the initiative to create wealth. Extremely high taxes on profits will also remove the wealth used by capitalists to create more wealth.

Under the President of the United States, Ronald Reagan, an economic policy that provided tax breaks to richer Americans became known as the "trickle down effect". It was suggested by the administration that poor and middle class people would be better off allowing the rich to have their tax breaks since almost 100% of the tax savings would be directly reinvested into new businesses or expansion of existing business. Thus, the poor and middle class would have new job opportunities and the economy would be in a position for a prolonged period of strong economic growth.

Do you think "the trickle down effect" is a valid economic policy?

Citizens in every nation need to understand where their nation is positioned on the scale between communism and capitalism (the CC scale). It is also important that citizens consider the direction in which the nation is moving on the scale. It is rare that a society ever rests long at any one point on the CC scale. Do you think the government should run the phone system? Some countries have just recently sold their state owned and operated communication systems to private interests in an effort to modernize the entire communication system. What about the mail and package systems? Is your mail system run by the government or private enterprise or perhaps by both competing systems? Should Federal Express and United Parcel Service in the U.S. be allowed to compete with the mail systems of governments all over the world? Would private industry agree to deliver a letter to anyone with an address anywhere in the world? What if it were unprofitable to do so? Would Federal Express do it for the same price the government charges? Cheaper? Faster? Is it dangerous to allow them to try?

With political and economic environments continually on the move throughout the world, every owner, manager and executive, from the smallest to the largest business must be constantly monitoring their external political and economic environments.

We propose a two critical thought question to you. The analysis has many facets and depends on your previous exposure to host of data sources.

"WHERE IS YOUR NATION ON THE CC SCALE?"

"IN WHAT DIRECTION ON THE CC SCALE IS YOUR NATION MOVING?"

Key Words:

- American Stock Exchange (AMEX)

- Assets
- Business
- Capital
- Capitalism
- Central Planning
- Communism
- Consumer
- Economic Environment
- Entity
- Entrepreneurs
- Free Enterprise System
- Incorporate
- Investment
- Listing
- Liquidity
- National Association of Securities Dealers Automate Quotations (NASDAQ)
- New York Stock Exchange (NYSE)
- Partnerships
- Private Enterprise
- Private Labeling
- Revenues
- Risk & Return
- Shares of Stock
- Sole Proprietorships
- Socialism
- Stockholders
- Stock Investors
- Supply and Demand
- Tariff

Chapter 3

Management

Individuals interact to achieve mutual goals or to achieve singular goals. The interactive environment can be supportive, such as in classrooms, or hostile such as in used car lots. The interaction process itself can change the goals and environment in which the goals are pursued. In some cases mutual goals become singular goals when members "sign on" or "buy in" or "become a partner". Singular goals might become mutual goals: "I want to sell you a car at a high price" interacting with "I want to buy a car at a low price" in a supportive situation might change to the mutual goal, "We want this deal to work". Such is the power of good management.

MANAGEMENT

Management is a general term, which covers all the situations where people working together interact in an attempt to accomplish goals and objectives. In some cases, the term management has been extended to the control of non-human resources. "I manage the computer system." "I manage the pipeline." But behind the responsibility of operating non-human resources, there was and there will be, human interaction. People need to communicate with people in order to accomplish tasks. Money, human resources, and material resources need to be brought together and managed through the interactions of individuals, teams, and groups. This is true even if one manages the human resource department, a computer system, or a pipeline.

There are different types of management positions designed to handle all aspects of business. The perspective from which you consider management will produce different interpretations of who and what managers do. One perspective is to consider management from a control point of view; "Who has the power to boss who around?" This perspective looks at the "chain of command" or who has what authority in the firm. One method of categorizing levels of command in business is as follows:

- Top Management
- Middle Management
- And no, it is not called Bottom Management. It is called, First Line Management.

Top Management is focused on design and implementation of the firm's overall strategy. At this level, management must constantly be aware of the firm's external threats and opportunities. Top management assumes responsibility for analyzing current information and planning for the future. Management at this level is guided by the vision set for the firm. The vision is a clear statement of where the firm is going and what it will be like when it arrives. The vision statement is generally a carefully worded statement about top management's dream for the future expressed in measurable objectives, and may include references to time horizons. The vision is a strategic statement and is often kept very confidential.

As part of the planning process to achieve the vision, top management usually creates a mission statement. The mission statement is a public statement about issues that the firm feels are very important as it goes about its vision quest. It often suggests limits and conditions that the firm must strive to maintain. Examples of content would be, "…provide quality products to …", "… respect all employees …", "… be a member of the community …", "… our stockholders will earn … ". The mission expresses management's fundamental principles and/or philosophy of how a business should be run.

Middle Managers are directly involved in the implementation of strategic initiatives developed by top management. They bridge the gap between management and the non-management labor force. Examples of first line managers are department chair (in an academic institution), office manager, floor supervisor and foreman.

Another perspective of management is to look at the skills and knowledge required to perform a task:

- **Technical Expertise:** Do I have the computer skills and knowledge to manage the computer systems department?
- **Analytical skills:** How do I sort out and interpret all this information?
- **Leadership skills:** Can I influence employees to work toward the firm's goals?
- **People skills:** Can I get a group or committee to agree to work together to achieve mutually beneficial goals for the benefit of the firm?
- **Critical Thinking Skills:** Do I understand the concepts involved in the problem? Do I have the history of the problem and how this problem is integrated into other aspects of the firm?

Outsiders, managers in lower levels, and non-management employees often review decisions made by management. In the after-the-fact analysis, observers criticize the decision maker suggesting they could do better themselves. In a narrow sense when focused on that part of the decision affecting the reviewer that may be true. But decision making by managers must incorporate all the skill and knowledge items listed above. A decision may be switched from the very best possible to just a good one in order to prevent another problem (critical thinking skills) or to have the entire committee enthusiastically endorse the decision (leadership and people skills). To the outsider, the decision might look rather mediocre at best. To the insider the decision might look like a great decision made with skill, daring and a great deal of management expertise.

A third perspective of management is to view specific functions that managers perform. These functions are often classified as:

- **Planning:** set objectives and map the strategy to achieve the objectives;
- **Organizing:** secure financial resources and implement the plan;
- **Staffing:** recruit the best people possible for the tasks;
- **Directing:** create written directives and train individuals
- **Controlling:** monitor performance of individuals and the entire project.

A fourth perspective of management is to view jobs as they are often classified in large-scale organizations:

- Human Resource Manager
- Financial Manager
- Production and Operations Manager
- Marketing Manager
- MIS Manager (Management Information Systems)
- Accounting Manager
- Administrative Manager

You will find these job classifications listed as majors in most schools of business. A reading of the catalog will help you see in some detail what each job entails. The administrative manager title is somewhat vague. In some schools it will be called a "management" option. It is not unusual to find specialized tracks in the management option of universities such as pre-law or international business. Within a firm, administrative manager may cover cross-functional jobs. An administrative manager may be responsible for a division (the natural juice division), a plant (the semiconductor

plant in San Jose) or be geographically responsible for all activities such as the firm's activities (manager of China operations).

How to Organize a Business:

Businesses have top down leadership. There is an established line of command much like that found in the military. Only a few changes have occurred in this top-down organizational structure in the last few thousand years.

Democracy as a system of government is fairly new in the history of human kind. It has allowed the masses of people in a nation to influence the work place environment of their nation. The masses, have in fact, become proactive. This has lead to the power of unions and the power to influence laws that govern the workplace. Until recently (1,000 to 100 years or so ago), the boss was not just *called* the slave master or dictator, he probably *was* the slave master, chief, or dictator. Those names can still be heard in the hallways of some businesses (muttered very softly) especially when the firm downsizes and the workload of the remaining workforce increases. The term **Chief Executive Officer (CEO)** however, is still used in a positive sense.

Slowly, the beheading or whipping of employees fell out of popularity. In its place came economic incentive. Paying someone to work for you did create some difficulties. Employees sometimes wanted more money and refused to work until they go it. But, despite an occasional work stoppage, the benefits of economic incentives as a means to motivate workers, was immense. It meant that the owner or manager was not responsible for taking care of the employee. The business did not have to build housing, provide food and take care of a family. The firm simply had to hand out money. Whether the worker's family lived or died was no longer a serious matter to the employer. This freedom from caring for the worker and his family, provided owners and managers time to concentrate on the revenue producing portions of the business enterprise.

The employee also was pleased to have money instead of housing and food as payment. Money as the main source of compensation provided freedom to select what to purchase and an opportunity for mobility. Mobility allowed workers to seek higher wages for their skills at other firms or to use the threat of going elsewhere to negotiate a higher wage.

History to many reading this text is something that happened more than twenty years ago. Critical thinking requires a person to consider history as a long-term evolving force, not an event with a specific date. The changes we are discussing are not isolated events but part of the entire fabric of social evolution. Your courses in philosophy, economics, history, political science, and others in your academic career will help you understand the immediate changes that you will experience in your lifetime in light of the evolution of change over the centuries. Democracy, the industrial revolution, NAFTA, computers, and digital communications are not isolated topics but part of an exciting process we are all part of. It takes an effort for a student who is likely to receive vast amounts of information in unrelated classes over their college career to integrate that knowledge to enable critical analysis required of top-level managers.

The monetary compensation system of motivation combined with the industrial revolution was a major factor in building the employer-employee system we have today. The study of how businesses are organized today reveals the "boss, dictator, chief, slave master" remains in control. There still is the line of command. However, the line of command continues to be modified over the centuries. A recent change in the way U.S. and E.U. business gets the job done came from the Pacific Basin.

Japan, having recovered from World War II, became an economic powerhouse. Firms in the United States and Europe died as the external threat from the Pacific Basin overpowered them. Firms went bankrupt, and entire industries fell to the production, distribution, and promotional power of firms in the Pacific Basin area. Corporate executives, government, and academic researchers examined the Japanese style of business in order to understand and to meet the threat.

Out of that decade of study came a new way to do business in North America and in Europe. This was the team approach. Information was to flow both ways. Top management would still make the major decisions, but employees were viewed as valued inputs to the decision making process. Information from employees was to move up the line of command to improve the base of knowledge on which major decisions were made. They also found that as employees talked with each other in teams across departments or functional areas, the team could solve many problems on site. This immediately improved efficiency, product quality, and service to the customers. The new system empowers the employee or employee team to make decisions at the point the problem occurs and in relation to that person's position in the firm. This improved efficiency, morale of employees, and the bottom line (profits).

This Pacific Basin style of teamwork and involving employees, brought dramatic change to the way businesses organize. At the same time, computer systems were developed that were capable of accumulating, organizing, and processing large volumes of data from multiple sites. With employees being empowered on the production line or at the point of customer contact and with the new computer technologies, much of the former staff that worked between the front line employee and the top decision-makers, were no longer needed.

Downsizing became the word of the day as firms eliminated sections of the line of command. Businesses compressed their organizational structure. In the process, many staff employees that handled the information flow and facilitated decision-making were not needed. The major decisions could be handled more efficiently at the top, and empowered employees solved the minor problems in a team fashion at the bottom. Many talented, middle-aged middle managers were out on the street looking for work.

The only safe guess we have about the future is that things will change. You need to accumulate as much knowledge and as many skills as you can in order to prepare for change. The system is not against you. It is not against anyone. It is simply a system on the move. There is an old Chinese proverb that goes something like this - "May you live in interesting times!". In fact, it was a greeting delivered to someone you hated. It was viewed as a curse! Change is not very pleasant. It forces us to become involved and improve, or, accept a lesser life.

The current system evolved because society agreed that change was beneficial. Governments not only tolerates change, they now promote it. Governments seeking a higher standard of living for their people embrace change and are catalysts for change. In this environment, entrepreneurs blossom, research and development laboratories of large-scale businesses are well funded, and individuals remain surprised at the startling new array of products and services.

Change produces new medicines, new technologies, new challenges, new ways of doing business. Change also eliminates jobs and redefines what makes a valued employee. Today, change is an inherent part of any business and a part of who we are as individuals and as a family. Change and our ability as individuals and business firms to embrace it determine our future and our place in the global economy. Change is reshaping us into a global tribe. We live in a most interesting time!

Human Resource Management in the Simulation:

By this time in the course, you, as a team member, have had the opportunity to interact with other team members. Here are some of the many possible observations you might have made about your team members:

1. Very skilled individual with few social skills; too shy to be productive.

2. Very skilled individual who knows it and wants to run everything - the person's idea of a team is that a group of less competent people will do the clerical work and the group will offer up much praise to their intellectual superior.

3. The individual is learning and trying very hard, but has too many problems in their personal life - if they ever learn that the team has needs and also demands a commitment, then there is hope.

4. The individual is learning and trying very hard but is slower than the rest of the team; what to do?

5. This person is on the team because there was no choice - there is considerable hostility that hampers good communication - hostility appears to be in general not specifically toward team members.

6. This person will not work! Simply has decided to jump on a team and catch a ride.

7. This person had an excuse for missing six of ten meetings.

8. This person was always there -- offered good suggestions, was prepared most of the time; although we often disagree about what to do, decisions are worked out through discussion.

9. This person is great -- always ready with information and supportive of all members -- a person I would like to go into business with.

9. This person is great -- I'm attempting to do well so that person will eventually notice me both as a contributor to the team and a potential date for Saturday night.

How do firms determine what type of person they need in the firm? Once they determine the need, how do they go about finding the special person to fill that need? As the needs of the firm and the needs of the person change over time, what can be done to keep them both growing? How do firms motivate employees? How do they control employees and keep them focused?

These questions are valid for any business. They are also valid for your team. Given the broad range of skills and motivation that might exist in your team, there are not always easy or definitive solutions available.

You should consider what would constitute a good team. Your instructor might request a written personnel document. Larger firms have personnel documents that specify expectations of employees and evaluation criteria. Personnel management has become both more complex and more important with the growing concerns over discrimination by sex, race, disabilities, and age. Firms must be able to document rational decision making in the hiring, firing and promotion process. To do so, the firm must establish some basic criteria.

Consider writing a clear and concise personnel document that does two things:

1. Specify what the team expects of each team member. Some categories might be:

- Be on-time to meetings
- Come to meetings having read related text materials
- Complete related WWW assignments
- Come to meetings having studied firm simulation results
- Contribute to team discussion
- Complete team assigned work
- Produce high quality work
- Be willing to compromise
- Be willing to share the workload, share knowledge, and offer help to team members having difficulty with a subject
- Be supportive of the team and its members.

2. Evaluate the performance of the team members based on the criteria. This is a process. How will your team make this judgment call? Assume the firm has set aside $50,000 in fixed administrative expenses per quarter. You have four members on your team. How much should each individual member receive? What if your instructor makes the salary earned by individuals, part of the course grade? Does this change how you view the criteria or the process of distributing salary to team members?

It is important to note that liking someone, hating someone, or feeling sorry for someone is not in the list of criteria. If your emotions cloud your view of the criteria, you have not acted in a professional manner and perhaps, not in a legal manner. It is very easy to read a personnel document on performance criteria and evaluation and then

proceed to mentally review the individual in your own personal set of standards. That is no longer acceptable in most businesses in many countries.

Strategic Management in the Simulation:

The process of reviewing the firm's intent set in the existing environments should be ongoing. In today's fast changing business world, internal and external monitoring should constantly be taking place. The small pizza shop down the road needs to be alert to…

- Changes in city zoning laws
- Changes in routing traffic
- The new pizza shops that might enter the market
- A Mexican restaurant that might open next door
- Changes in tax code
- Changes in promotional activities of other restaurants
- Changes in the ready-to-eat section of supermarkets
- Changes in the agreement on the property lease where the restaurant is located
- Changes in insurance coverage for fire and for liability
- Changes in the responsibility of the employer regarding employees

…and the list goes on.

The task of running even a small family operated pizza restaurant can be overwhelming. If problems and opportunities are considered only when they reach crisis proportions, then survival of the firm is questionable. No matter what the size of the firm, someone in the family pizza restaurant, a group in Ford Motor Company, or a group in Sony Corporation, the firm must make sure the business moves forward through the complicated business environment toward the firm's evolving vision.

This process of constant monitoring of the firm's internal and external environments and resulting adjustments by the firm is called **strategic management**. It is a rational consideration of the forces at work both inside and outside the firm. When threats or opportunities are determined, the firm needs to take action. This early warning system and resulting decision making is defined as being proactive. That is, instead of waiting for something to alter the direction of the firm, the firm itself becomes a force in determining how events will play out.

The Starting Point for a Business

People organize to achieve some goal or objective. It might be a simple short run goal such as a surprise party for Aunt Elizabeth. It might be a very long run complex plan such as establishing plants, equipment and a marketing force to dominate the world auto market.

Before you can navigate, you need to know where you want to go. Where you want to go is referred to as your intent or **vision**. Entrepreneurs create a vision of where they want to go, develop a plan to get there and then proceed. Sometimes, the vision is based on a new piece of equipment, idea, or invention they came up with by being

involved with another task. Something as simple as a home baked cookie in the hands of an entrepreneur with a vision can become a $100,000,000 business.

The Starting Point for Your Team:

Your business team will be asked to establish a **vision statement**. Each member of the team needs to participate in the creation of that vision statement. The statement can be based on several standards. Do you want your firm to end the simulation with a value created for the stockholder that exceeds the value created by any other team? Or, would you like the value your team created to be in the upper half of all firms? These two visions based on the same standard are very different. Each requires the team to consider how the firm is financed, how assets are used, how to react to competitors and how hard the team will work. Desiring to be the best also requires the team to take on more risk than most firms in order to achieve above average gains. As in most business ventures, taking on more risk exposes the team to a greater chance of failure.

Returns to stockholders can be measured by the simulation's standardized assessment system, which evaluates the original value a stockholder put in (cost of one share of stock) against the last average annual price of the stock plus any dividends. Another, more simple measure provided by the simulation is the rate of annual profit when measured against the stockholder's total investment. A return on the stockholder's investment (their total equity) of 15% is far better than a return of 8%. A firm can measure itself easily against the return on equity of all the other firms in the simulation.

Creating a value for stockholders is one standard. Another common performance standard is sales. Your team might go into business with the intent to achieve more sales annually than any other firm in the simulation. This vision of being the largest sales organization in the simulation will require dependable finished goods suppliers, a large capital structure, close monitoring of the competition (in your industry and in other industries), and an aggressive well-defined marketing program.

If you don't like the performance standards of creating value for stockholders or annual sales, what about profit after tax? Suppose you were to measure profit after tax. The team could measure the firm's total annual profits against competitors. But, the larger firms tend to have the larger amounts of profits. Therefore, measure profits as a percentage of assets. Then you are measuring management's skill at utilizing the assets they have in their control. A return of 20% annually on assets is better than a 15% return regardless of the firm's size. With the highest return on assets (sometimes called return on total investment, both debt and equity) our team can then say, "We are the best run firm in the industry."

Some firms start into business with a less specific intent. They might visualize their firm in the future as: "A firm with a solid market share position with both products in NAFTA and a presence in the EU markets. In addition, our firm will have a respectable share price, the trust of all our stakeholders, and never fail in maintaining high ethical standards." The team could also consider such values as product quality, respect and dignity for employees, and consideration for the environment.

Stating the firm's intent or vision helps top management plan and make decisions. Two problems might arise from formalizing the vision statement in measurable terms. First, the measurement standard could be set so rigidly or be so tightly defined that it is not able to stand sudden shifts in the external environment. For example, assume a team

developed this vision, "We will create value to our stockholder, doubling the original stock price within two years." A situation might develop in politics that will shake investor confidence and the stock market could crash. The firm's stock might end up in the simulation with less value than it started with, and it wouldn't have been the fault of the management team. It might be best to keep your firm's vision measured on a relative scale. That is, "We want a share price that is in the upper half of all firms". With this statement, even if the stock market crashes, you might be well within the upper half of stock value of all the firms.

The first problem in writing a vision statement is being too restrictive in measuring success. The second problem is being non-descriptive. If the statement is not well defined, it will not provide the management team with clear goals and objectives. A statement such as, "The team wants to feel good about their experience." is difficult to measure and provides no direction for consistently good decisions.

Generally in the simulation, as with business firms, an initial statement of intent is agreed upon by the team members. Once the business is started, a better view is gained of the threats and opportunities facing the firm. The team better understands its competitive environment and the greater economic and political environments it is operating in. By the end of the first year there will be a keen appreciation of the skill level of the team itself and the willingness of team members to contribute to the firm's vision.

The review of the vision statement at the end of the first year combined with a strategic analysis of internal resources and external threats and opportunities often result in a modification of the vision statement. This brings the firm's intent into line with the realities of the total business environment.

Strategy Development

Decision Making:

In order to make good business decisions managers must have both qualitative and quantitative information and have a process for evaluating information for decision making. The Decision Sciences Institute is an academic association that focuses on the logical, rational, and quantitative aspects of making decisions. Most of the academy's members are university instructors from the quantitative disciplines in business such as finance, statistics, mathematics, and management information systems. Their views of decision-making are quite different than those of other academic disciplines in business, such as strategic management.

Strategic management is taught more as a process of decision-making and considers numerous non-quantitative variables as well as quantitative data. The strategic management process directs decision-makers to consider both internal and external environments when they analyze data and make decisions.

In order to consistently make good decisions, the executive team must have:

a. The ability to work with both qualitative and quantitative data
b. Quality information in the appropriate format
c. A decision making process in place
d. The team must share the same set of objectives or goals.

Decision makers can further reduce the risk of making a poor decision by constantly monitoring both the **internal and external environments**. Say, for example, that market research concludes (with little chance of error) that consumers adore the firm's new test product and would buy it at the suggested retail price. If it's your decision, why not give the go-ahead to spend thousands of dollars on advertising, order production and have the marketing department start writing orders. It could be a good decision that turns bad very fast if production workers are about to go on strike (an internal environment problem). What if the competition held a press release last week to announce their new product and it looks just like yours but is 20% less expensive (an external problem)?

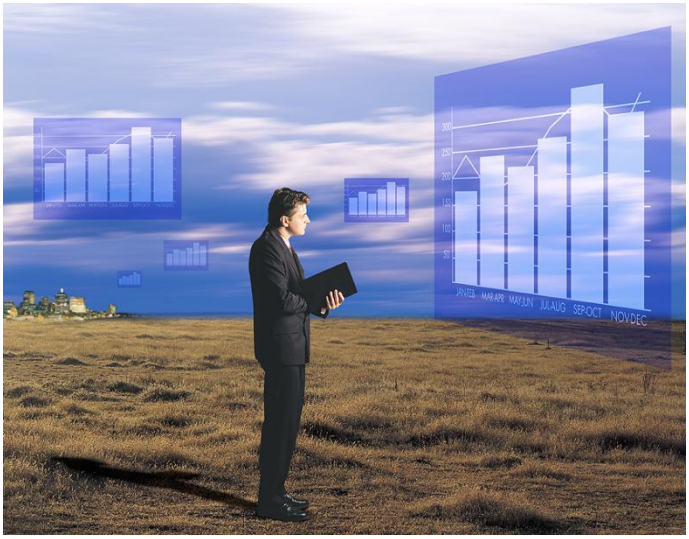
Decision-making is very easy if you don't care what the outcome will be to eliminate sloppy decision-making, Boards of Directors, the Chief Executive Officer (CEO), and a close group of top-level executives attempt to direct the activity of the employees toward a set of objectives set for the firm. In this simulation, that group of top-level executives refers to you and your team partners.

Key Words:

- Chief Executive Officer (CEO)
- Internal & External Environments
- Strategic Management
- Vision
- Vision Statement

Chapter 4

Marketing -- The 4 P's



This chapter will provide an overview of marketing and the 4P's. Marketing sets the image of a product and the company. No matter what the size of the business, marketing is crucial for success.

MARKETING – THE 4P'S

Infrastructure

Most of your marketing experiences have been as a buyer. Think about how many items you purchased in retail stores during your lifetime. What is your first recollection of a purchase? Probably grabbing something at the grocery store while your mother attempted to keep you under control. How does it happen that a buyer can go to the grocery store and find items to buy at an acceptable price? Who made what decisions to places orange juice just where you need it, at the time you need it, at the price you can afford, and tell you about it?

How do marketing systems in a nation come to be? People have a need for a **product** and have been informed about the product through the firm's **promotion** of that product. The customer requires that the product or service be in some geographic **place** and available within some narrowly defined time period. Of course this must all take place at a **price** the buyer is willing to pay. These requirements to meet a buyer's needs are often referred to as the "**4 P's**" of marketing:

- **P**roduct
- **P**lace
- **P**rice
- **P**romotion.

How the 4 P's are implemented in a nation depends in large part on how society sets up its **infrastructure**. Infrastructure is the physical support structure that moves things from place to place in a society. The "things" being moved about could be people, products, voice, video, water, electricity, data, letters, parcels, raw materials, etc.. Because of the enormous scale (size) of building infrastructure within a nation, the government generally undertakes the project or provides legal and financial support to private enterprises to encourage firms to take on the needed projects. Examples of such projects would be roads, canals, dams, railroads, post offices, airports, and telecommunication systems.

Sometimes governments actually operate enterprises tied closely to infrastructure projects. Examples would be electrical generating plants (hydraulic, fossil fuel, and nuclear), phone systems, toll roads, waste management systems, and mail delivery.

If a country's population is widely scattered and roads are poor, catalog sales may be the method by which the population fills most of their needs for non-perishable goods. If the government **subsidizes** (covers part of the cost) of the mail system, even more catalog sales will occur. As households in a society become more concentrated, government revenues increase for that area allowing roads to be built. Infrastructure is not consistently distributed throughout any one political or geographic area. It is known that efficiencies in manufacturing and distribution are gained as infrastructure improvements are made. The efficiencies lower the cost of goods to consumers and increase profits to businesses creating additional wealth within the society.

The Internet is a new infrastructure system that is changing all aspects of marketing. The Internet system was initially a government sponsored infrastructure project utilizing privately owned telephone lines. Its purpose was for defense not

commercial use. Once the infrastructure was in place however, commercial applications followed. Virtual retail stores that sell products and services directly to consumers on the Internet are now common.

Southwest Airlines in the United States, for example, is making it convenient to shop for and purchase tickets on the Internet, thus bypassing an entire travel agency industry. Other market-oriented firms are considering the Internet as a means to promote their products.

Society, through its government's sponsorship or encouragement, creates the infrastructure, which allows for the development of business and the marketing of its goods and services. Society, through its government, also creates rules and regulations that dictate how private firms can use and develop the infrastructure. For example, a government can make it illegal for any firm to compete with its own postal service or it can allow limited competition from private carriers such as DHL or United Parcel Service.

It is important that the members of a society understand the importance of creating infrastructure and the government's direct and indirect role in this process. Good infrastructure will permit the creation of wealth and opportunity for many people within that society.

Entrepreneurs in poor nations are often frustrated with the existing infrastructure. They might pressure the government to build bridges, dams, electrical plants, ports, and a phone system. All members of society will eventually benefit as the entire nation becomes wealthier. However, in the short run, while the nation is being developed, many of the poorest members may suffer and even die as funds that might otherwise be spent for humanitarian purposes are shifted to the building of infrastructure.

A way out of this predicament is to entice private capital from large foreign firms. This is often accomplished by offering large tax incentives or free land to foreign corporations. If foreign manufacturers can be encouraged to build facilities in poor countries that lack infrastructure, their money, along with the employment of local workers, will help lift a nation out of poverty.

Citizens of wealthier nations often complain about inferior infrastructure such as poor electrical or phone service. When infrastructure changes are initiated, everyone benefits in the long run but some groups may suffer in the shorter run. Wireless phone service requires phone towers in residential areas. While everyone in the area is pleased to have a wireless phone, the few households that have the tower near their home are not at all pleased. To what extent should private firms or governments have the right to build airports, phone systems, electrical towers and such when it creates concerns for citizens living near the project? This is not about government's right to take private property for the public good through imminent domain, but about having projects placed "too" close to a citizen's property.

The 4 Ps and Web Marketing

Products and services are supplied by businesses for the benefit of businesses (business-to-business or B-to-B) or by businesses for the benefit of consumers (B-to-C). This distinction between the types of users of products and services has recently been redefined due to Web based sales. "B-to-B" and "B-to-C" spaces are new terms to help express the rapidly changing distribution systems used by businesses. The word "space" as currently used defines a set of business activities generally related to specific markets. The Internet has allowed some typical B-to-B firms to market via the Web directly to the consumer bypassing well-established B-to-C firms. Some new Internet firms are selling B-to-C through a virtual retail store. Virtual Web stores bypass the very expensive process of building a real retail store (referred to as a "brick and mortar store"). This dramatic environment has shaken the very definition of the 4 Ps of marketing. We will follow the standard definitions but will also pose questions to better understand how marketing must adapt to the rapidly changing international and technology driven environments.

Product

Product includes both products and services. The common perception is to think of products in a physical sense such as a car, a Coke, a massage, or having your palm read by a fortuneteller. Marketing professionals know a product defined by value added instead of physical features is very different. When you purchase your Coke are you:

A. After a cold drink?
B. Seeking a brand name you can rely on for consistent flavor?
C. Quenching a thirst?
D. Avoiding decisions about which brand is the best flavor?
E. Avoiding decisions about which brand is the best price?
F. Thinking about the last Coke commercial you saw?
G. Satisfied about the red color on the can (or bottle shape)?
H. Feeling as though you are part of a world order of youth that endorses Coke?
I. Feeling Coke is American and I like America?
J. Just wanting a Coke like the first Coke you had at the age of three and you don't even want to think about why you want it?

The list does not exhaust all the possibilities for the purchase of a Coke, a Pepsi, or any other soft drink for that matter. Similar lists can be made for most products and services. When you purchase the services of a fortuneteller are you:

A. After fun with your friends (entertainment)?
B. Buying a present for someone who would never purchase such a service on their own?
C. Really attempting to look ahead to the future?

Consider the purchase of a new car? When someone purchases a powerful convertible sports car is that person purchasing basic transportation? No, there is more to the product than its physical parts. What are three possible motives for purchasing such a machine?

A.
B.
C.

Product design, color, image, taste, warranty, service availability, quality, consistency, repair facilities, financing, dependability, cost of repairs, texture, package, printed language instructions, web support, tech support, upgrades, and training are all important parts of the product. This list does not include the other 3 Ps being place, promotion and price.

Manufacturers and service providers must analyze their potential markets prior to creating or altering products. The more buying motives you can satisfy with a product, the more total buyers you will have. How many buying motives can be satisfied with a certain product or service? Can more groups of people be served if the product is altered slightly? For example, can we alter Coke to become Coke Classic and gain new buyers? Perhaps, but can we do so without loosing existing consumers who purchase for other motives?

It is often very difficult for the maker of the product or provider of the service to fully understand why all their customers purchase their product. Many people ask the consumer why they purchased the product or if they were satisfied with the service provided. Leaving a small tip at a restaurant might indicate you liked the food but not the service or you liked the service but not the food. Cards placed on the table at some restaurants inquire about your level of satisfaction regarding both food and service. The card responses allow management to determine what part of your dinning experience a customer liked and disliked. As a consumer you will often find cards attached to product warranties that ask for personal information. The information collected from the card allows the company to gather a **customer profile**. The firm can then determine how to improve or alter the product to gain new customers without loosing existing customers or how to sell you additional products and services.

Place -- Marketing And Distribution

Delivering the product or service at the right place and at the right time in good condition is a major component of a quality marketing program. Many products and services in today's marketplace will be transported many times, adding value at each stop, before the end consumer makes the purchase.

The product or service will move through what is called the **distribution channel** on its way to the end consumer. Buyers are other firms in the distribution channel adding value directly to the product or adding place value by locating the product where the final consumer can purchase it. Eventually end users will purchase a product or service from the firm within a given distribution channel. Distribution channels are identified by type of product. A person might talk about the distribution channel for bread, or flour, or wheat or food in general. Examples of an end user are:

1. A college student buying pasta and bread at a local grocery store where the retail grocery store is the final stop in the distribution channel for food
2. A student purchasing a computer directly from a manufacturer's website is a modern Internet distribution channel, which concludes at the home where United Parcel or DHL delivers the product

Industrial customers use the product or service for their own business needs. Not all products find there way to retail stores (brick and mortar or virtual) and consumers. Some products are designed and placed to satisfy businesses as the end user. Examples are:

1. A dump truck with snowplow attachment sold by Ford Motor Company to the local highway department
2. Six drums of hydraulic fluid sold to a firm that manufactures breakfast cereal
3. An accounting service for a local motel

Industrial buyers usually look for a good quality product, prompt delivery and a competitive price. Because industrial buyers are less affected by emotions in their purchases than are retail customers, businesses in the supply chain focus on price, delivery and good quality when promoting their products or services to industrial buyers rather than packaging or emotional appeal.

A firm selling cleaning supplies may promote its products by emphasizing the fact that it can deliver a wide assortment of goods within 24 hours. This will enable the buyer of these items to keep a minimum amount of supplies on hand, thus reducing the amount of money tied up in **inventory**. Just-in-time delivery of products and services allows firms to operate with less storage capacity and less money tied up in raw material inventories. It is critical in this type of operation to find businesses that can be depended on to deliver just-in-time.

Examine the marketing channel which exists between wheat growers to bread **manufacturers** presented in **Exhibit 1**. More channels are required to produce the product than we present in the exhibit. The exhibit only follows the wheat to bread channel with reference only to other supporting channels. The wheat to bread marketing channel requires numerous other channels in order to maintain the flow of product.

At some points in the channel, sales organizations arrange the sale between a seller and buyer without taking title to the goods. These **brokers**, **agents** and **sales representatives** act just like a real estate agent would. They assist the buyer in arranging for the sale of a product. Each channel has a history that created the system through which the product moves. Some systems transfer title or ownership at each step. Other channels use agents or brokers to facilitate movement of the product.

In general terms, brokers work on large, one-time deals like a home sale. Agents generally represent the same client for many deals. Agents represent the buyer or the seller and on rare occasion represent both sides. An agent, for example, might represent the author of a spy novel and will continue to do so through many books and movie contracts.

A sales representative (sometimes called a manufacturer's representative) promotes the firm's product along with similar products from other firms. Sales reps

(reps is the slang term used by most businesses) handle a wide variety of smaller transactions usually to retail store buyers. While the rep's total volume of orders might be fairly large, the order for any one product from any one store may be fairly small.

Examine the channels in **Exhibit 1**. The next time you have a piece of wheat toast consider what it took, in terms of established marketing channels, to bring that bread to your table.

Exhibit 1

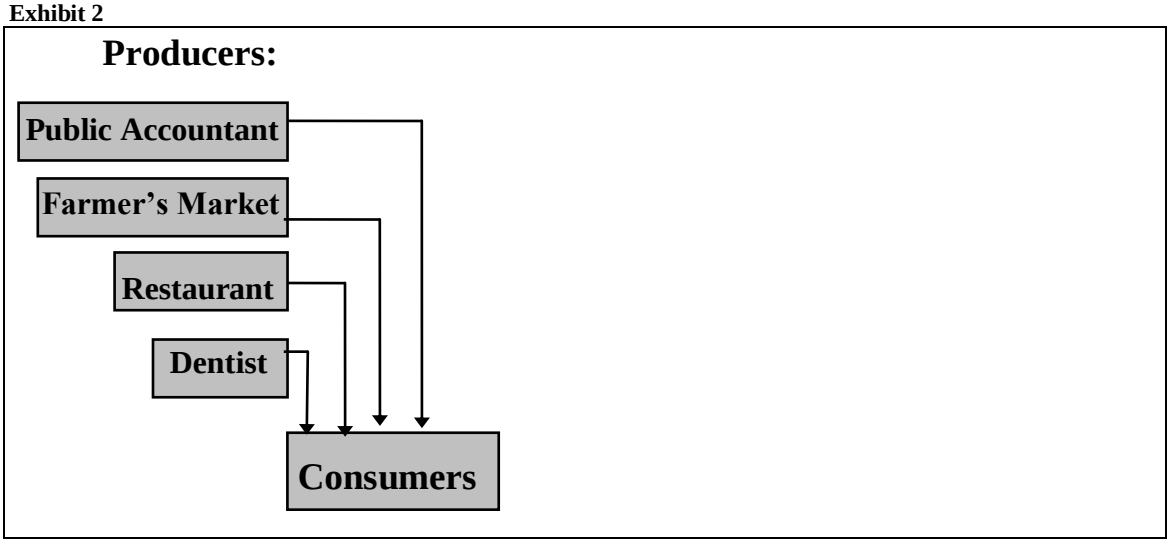
Distribution Channel of Wheat from Farmer to Bread Manufacturer

CHANNEL	SUPPORTING CHANNELS
Wheat seed purchased by Farmer ↓	Marketing channel for the production and sale of wheat seeds to farmers ←(support)
Farm supplies purchased and used (tractors, harvesters, fuel, fertilizer) ↓	Sale of farm equipment to farmers ←(support)
Wheat Crop sold by Broker, Agent, or Farmer's Cooperative ↓	↖Repair service for farm equipment (support)
Storage and transportation ↓	↖Accounting and Banking (support)
Milling into flour ↓	Flour mill Broker or Agent ←
Baker purchases flour, secures Other bread ingredients (Eggs, Yeast, etc.) ↓	Various marketing channels for each type of ingredient (eggs, yeast, etc.) and the Broker or Agent for these channels ←
Baking (mixers, ovens and other) ↓	Broker or Agent selling equipment ←
Packaging; to end consumer if bakery is in a retail store; otherwise channel continues by truck delivery with sales reps selling bread to retail stores	Marketing channel for plastic bags and twisty ties used to package the bread. Sales reps to sell packaging supplies to bread manufacturers ←

As a staff member in a marketing team you would be concerned about the section of a particular channel in which your firm is positioned. For example, assume your firm is the baked goods producer that sells to the supermarkets. Even though your livelihood is dependent on that section of the distribution channel, you and other executives must be aware of what is happening throughout the entire channel. This is being aware of your external environment. Should the wheat crop be damaged or truckers go on strike, you need to be prepared. What if a major food store chain (your best customer) decides to open in-store bakeries? You need to have some system developed to learn about such activities before they happen.

Sometimes the distribution channel is very direct. This is true of many services and local products as shown in **Exhibit 2.**

Exhibit 2



Next, in **Exhibit 3,** a commonly used marketing channel is presented. This channel design has developed for two reasons. First, smaller manufactures that sell across a broad geographic region cannot bear the cost of a large sales force. Thus, they rely on agents, brokers and sales representatives. In this fashion, the cost of driving to a store to see the buyer and attempting to make a sale is spread out over the product lines of several manufactures.

A second reason for the channel design represented in **Exhibit 3** is that manufactures dislike small orders going to a large variety of stores. The packaging and accounting with each small order increases the cost of doing business. Store buyers also dislike placing small orders direct from manufactures because small orders:

- Increase the number of sales people they must talk with
- Increase the number of orders they must write
- Increase the number of invoices they must pay (increasing accounting costs).

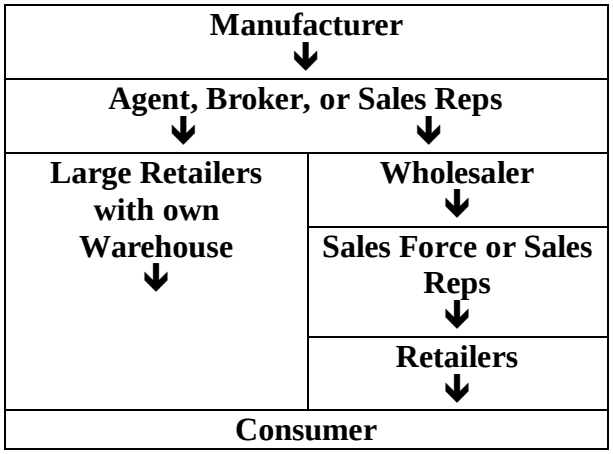
Consider a drug store and its products. Imagine if each store had to meet with a sales person for each product carried in that store. The task would be excessively time consuming and would dramatically increase costs. How many sales people direct from each manufacturer would be needed to call on a drug store just to have a complete cosmetics section in the store? To make the system more efficient, sales reps, representing many firms and products will contact the store buyer. Instead of sending little orders to each manufacturer, the sales reps will send all the small orders as a batch to a wholesaler, not to each manufacturer.

The answer to the small orders dilemma is the **wholesaler**. The wholesaler actually takes title to the merchandise. The wholesaler's sales force or sales representatives will call on a buyer, such as a supermarket. The buyer can place an order with the wholesaler for six different types of beer from six different manufactures and have all of them delivered from the wholesaler's warehouse in days or even hours. In this fashion,

wholesalers, agents, brokers and sales representatives provide a vital function in the marketing channel.

There is often great rivalry between wholesalers for accounts. The wholesaler is caught between two forces; the manufacturer who wants a lot of large volume orders from the wholesaler and the retail store that wants products quickly, in small amounts and in good condition. To be competitively priced, the wholesaler can only take a small profit on each item sold. To make money under these conditions, the wholesaler must sell the inventory quickly (called **turnover**, just like a restaurant must turnover its tables quickly). Competition in the wholesale business is keen and does not allow a firm to make many mistakes.

Exhibit 3



Marketing channels evolve and continue to change over time. Producers of goods and services often use more than one channel. A snack food manufacturer may run a fleet of their own trucks locally, sell to a national grocery chain which has its own warehouses and sell to numerous wholesalers who in turn contract via reps to deliver directly to small retail stores. One day the snack food company will have its truck deliver to a national grocery chain store warehouse. The next day the snack food company truck will deliver to four wholesalers at the wholesaler's warehouses. Over the next two days the wholesaler's trucks will deliver directly to local grocery stores and convenience stores based on orders taken by sales reps.

The airline industry channel for ticket sales is shown in **Exhibit 4**. The **commission** paid to travel agents for providing the ticketing service is a small percentage of the total cost of a ticket, about 6%. If airlines write the ticket themselves, they keep the 6% commission. In the airline industry, 6% of sales amounts to millions and millions of dollars each year. The airline industry would like to have those millions instead of seeing them go to the travel agents.

Many buyers do not use the airline's ticketing service. Instead, they go to a travel agent and depend on the agent to do their ticket shopping for them. The air ticket buyer often has difficulty gathering information about flight schedules, class of service, cost and limitations on use of the ticket. Even if the customer could get all the information from several airlines, most cannot analyze the information efficiently. A travel agent,

therefore, does a service for both the airline and the buyer, a service that cannot be duplicated by any one airline.

A new Web service is being developed that will automatically query multiple airline data-bases to find suitable choices for the air ticket consumer. If this service works as expected, the software will be able to satisfy the needs of many ticket buyers. Some buyers will still have a motivation to conduct business with a real person, not want to make an independent decision, cannot conduct business over the Internet or have other motivations that will require travel agent services.

Exhibit 4

Retail portion of the Air Ticket Channel

<table>
<tr><td colspan="2">Airline
↙ ↘</td></tr>
<tr><td>(On-site, by Phone, or Internet)
Consumer</td><td>(Computer or Phone)
Travel Agent
↓</td></tr>
<tr><td></td><td>(On-site or by Phone)
Consumer</td></tr>
</table>

Utilizing the Internet airlines might be able to provide a service that matches or beats the service provided by most travel agents. If this new technology works and buyers purchase their own tickets, the travel agents will suffer a decline in sales. The airlines will have 6% additional revenue from the Internet sales. Even more important, perhaps, the airlines will be able to communicate directly with their customers. The Internet will allow airlines to promote their ticket information in a clear format without pressuring the potential buyer. Buyers will be able to shop airline to airline before making a choice.

Once the potential buyer is on-line, airlines can also promote travel and vacation packages. It is just a click of the mouse for a potential ticket buyer to become a complete vacation buyer. If successful with the new technology, airlines could take over the entire travel agents' revenue source. This would include not only commissions from the airline ticket, but also from the rental car and the hotel. If the airlines can generate enough volume in sales for rental car firms and hotels, they can arrange for special low cost rates that travel agents cannot beat. Because of the Internet, the airlines may eventually change who they are and what they sell.

When a firm utilizes the benefits of a longer marketing channel it has less work, can concentrate on what it does best and overall become more efficient. However, each additional step in the marketing channel makes the producer less aware of the needs of the end user. Not being aware of the end users' changing needs will allow competitors to better fill the needs and take the firm's customers.

To the travel agent, the new technology is not an opportunity but a threat. Travel agents will need to respond to the threat of a collapsing market channel. If they cannot defend their role in the marketing channel, they will fade from the travel scene. If the new Internet technology works, how would a small travel agency compete with a giant on the

Internet like American Airlines? For one small firm it might be impossible. For a group of travel firms joining into an association, it might be possible. A large enough group, all agreeing to work together, might be able to create some competitive Internet software. The new software might let potential customers examine the offerings of several airlines for their desired destinations at one Internet site. Which site? The not-yet-created Travel Association Internet Site. If a site is not initiated by an association of travel agents then an entrepreneur might create such software with the intention of selling it to travel agents.

Given the sudden technological revolution it appears that all firms in all industries need to deal with dynamic external changes.

1. Sometimes competitors need to work together in an association in order to meet serious external threats.
2. Marketing channels, technology and customer needs are always evolving. Change will occur at different rates of speed over time.
3. Business people need to seek out the opportunities in change.
4. Business people need to recognize threats that evolve when environments change and deal with the threats early on -- that is, be proactive.
5. Nations, societies and governments need to provide businesses with the freedom and aid needed to meet changing external environments.

Promotion

Retail Promotion:

Your business must alert potential buyers that:

- Your product or service exists
- That you are ready to do business
- Provide directions to the location of the product (physical or Web).

Promotional activities must continue at some level as long as the firm is in business. Very few businesses secure a clientele and never have to be concerned about promotion thereafter. Perhaps small breakfast and lunch restaurants might be in the category of minimal promotion. But even these lucky businesses usually put out a lunch billboard or a list of specials at the point of purchase.

Sierra Nevada is a microbrewery located in Northern California. The brewer's products are sold throughout the United States. Amazingly, the firm has never advertised its products to the consumer through typical advertising methods (television, radio, print media). Sierra Nevada has promoted its beers at competitions and beer festivals. It also has signs located at the point of purchase in pubs and taverns. Such a high level of success with such minimal promotion is highly unusual. The reason that this business model worked so well is due to several factors. The firm started business just as microbrews became very popular. The firm made a uniquely flavored high quality brew that was tasted by and accepted by most microbrew consumers. The microbrew market is a very small segment (niche market) existing in a very large beer market. The small

upper end niche market has sophisticated and loyal consumers that do not respond well to normal advertising promotions. Thus the firm was able to secure loyal customers early in the development of the market, which competitors cannot easily take over through advertising.

Wholesale/Distributor Promotion:

Assume you carry the right products from the right manufactures, have dependable delivery, extend credit, a state-of-the-art billing system, and a pleasant, hard working and ethical staff. How can you market this image to firms? B-to-B firms must market their products and services both down the channel to the producer (manufacturer) and up the channel to other firms. To sell a firm down the marketing channel, you need to market your business as a valuable outlet for the manufacturer's products. Entering into discussion to form a business relationship with a manufacturer, wholesaler or distributor will require the consideration of several items and attempted negotiation of:

- Extended terms on your invoices in order to delay payment
- The right to return poor quality merchandise directly to the manufacturer
- The exclusive right to sell the manufacturer's products in your territory
- Minimum order size (larger is better from the manufacturer's point of view)
- Turnaround time from order to delivery.

The results of negotiations establish the relationship and influences how wholesalers and distributors will relate to their clients.

Many business textbooks, when describing the flow of products in the marketing channel, show the arrows moving from producers to consumers. This describes the flow of physical goods, but not the flow of information and service. Wholesalers and distributors in the middle of the channel need to be concerned about promotion and service moving in both directions. That is, throughout the channel from retail store to the producer. Wholesalers and distributors need to inform producers and retail store buyers about the types of services they perform. They must also be prompt in meeting business obligations such as billing, paying bills, and responding to complaints. B-to-B relationships extend beyond the movement of product. The relationship provides a direct source of information about competitors and the response of customers to the product. The relationship also allows for discussions concerning price changes and technological changes in existing products.

Producer (Manufacturer):

Manufacturers are in the B-to-B market space except for a few attempting to reach the end consumer through the Web. Even though manufacturers sell to wholesalers and distributors in the B-to-B markets, it is essential that the firm seek answers to many questions about the end user.

- What do you need the buyers to know about your product or service?
- Do firms in the distribution channel and end consumers need instructions on how to use your product or service?
- Are the potential buyers aware that your product will satisfy a need that they have?

- Who will be using the product?
- Can potential buyers be identified by some characteristics? Do those characteristics fit any advertising vehicle that the firm can afford. For example, what advertising vehicle will hit the target market defined as teenagers 12 - 18 years old? What about the target market of working mothers?
- What strategies can be used to create demand for a new product or stimulate sales for an existing product?

In response to the last question we next discuss two major strategies that can be used at all levels in the distribution channel but particularly at the manufacturing level. The two strategies are the **push strategy** and the **pull strategy**.

The Push Strategy

We start the discussion by presenting a very common problem experienced by new producers. Assume indications are that consumers would purchase your product if it were available. To get the product to the consumer, the firm will need to move it through the distribution channel. Resistance will most likely be met all the way through that channel. Retail stores have only so many square feet of space to display products. While they do change their product mix to meet their customer's buying patterns, they prefer to stay with products, which are proven winners. Each square foot of space in a retail store is valuable. Retail store managers view each square foot of floor space as a rancher would view his orchard. Each tree in the orchard produces revenue just as each set of store shelves produce revenue. Both the tree and the square foot of retail space are capable of producing revenue. Both need the right mix of products and care at that exact spot. For a tree to produce good revenues they need the right mix of soil, pruning, fertilizer, pollination, pesticide, and harvesting. In the case of a retail store, the right mix to generate maximum revenues consists of location, parking, building design, interior shelves or stands, the buying and placing of products, pricing products, presentation, and finally the sale at the checkout point.

Every producer wants the prime space in the retail store -- the spot where every customer will look:

- Not too high
- Not too low
- Not in some remote spot in the retail shop.

Every time a product leaves the shelf and ends up at the cash register, the retailer brings home the money. Given products that have similar prices, the ones that sell fast (have a high turnover) will make the most money for a retailer.

Here then, is the manufacturer's problem. Why would a retailer give up profitable shelf space or square footage on the sales floor for an unknown, new product? This would be profit right out of the retailer's pocket if the product sold slowly (had a low turnover rate), or worse yet, if the product did not sell at all.

The problem moves back through the distribution channel since the wholesaler will not carry a new firm's product unless the retailer is going to buy it. Wholesalers also have shelf and floor space. They will only stock products with a high turnover, which is dependent on the retailer having a high turnover. How then, with such resistance existing

in the marketing channels, can a new manufacturing firm push its products through the system? How can it encourage all levels in the distribution system to carry the product?

Advertising to both the wholesaler and retailer will help. Advertising in trade publications, such as magazines and newsletters that wholesalers and retailers in a particular line of business read, will inform the professional buyers of your existence. Price promotion to buyers within the channel will help get it started. Price promotion could be one free case with every twelve cases. It will take some study of the firm's unique distribution system to determine if the price discount should go to the wholesaler or the retailer. Maybe firms in the channel would prefer to have a price discount rather than free product. It is important to discover what they would prefer, not what you as the producer would prefer.

Maybe instead of a price discount, a firm could offer free shipping. Or instead of shipping a pallet of product at a time, which would be preferable in the future, the manufacturer might agree to ship only a case at a time. For a new product, perhaps shipping in small quantities is preferred, since there is less risk for everyone in the distribution system. This will increase some variable costs for the manufacturer, such as billing and transportation, but hopefully that will be a short run problem once the product has proven itself in the marketplace.

Another way to push a product is to provide sales training to other members in the channel. The manufacturer can explain how the product is made or used. This type of training is important in high priced goods such as furniture or technical products such as computers. It informs the other channel members about the distinctive product features, and educates them on how to sell the product. This method of promotion can be very expensive.

In summary, a push strategy is aimed at informing members throughout the channel about the product and making it easier or more profitable to sell.

The Pull Strategy:

Now, imagine starting a business and despite your effort of making a quality product, pricing it strategically to penetrate the market, and promoting it throughout the marketing channel, you still cannot reach the break-even point (that is, make a profit). Not enough firms in the channel will handle your new product. If, after careful study, you are convinced the end consumer wants the product but the distribution system will not make room for it, you have three choices.

1. You can quit. Many firms do so at this point. If the firm was **undercapitalized**, that is, started without enough money, then there may not be any other choice. When plans are not fulfilled in a timely manner and money runs out, then in hindsight we can say the firm was undercapitalized. Running out of money might occur because the entrepreneur seriously underestimated the length required to penetrate existing markets. Funds are needed to start the business. But once a business is started, it may take some time to earn the funds needed to keep the business working. The funds needed to keep the day-to-day operations of a business working are known as **working capital**. This is the money to keep people on the payroll, pay the electric bill, manufacture product, etc..

Of major importance in any business is coordinating the financing of the business with production needs (raw materials and labor) and with marketing needs (promotion, advertising, discounts and incentives, sales force compensation). Even with the most talented managers possible in each area of the firm, the firm will be in serious trouble if management has not taken the time to strategically integrate each of the firm's operations into a complete business plan.

2. The second choice is to eliminate the middleman in the marketing channel. This takes an immense success drive and long term stamina. This option is generally used only when the manager of the business is also the owner or at least one of the major stockholders. Self-preservation of ego will propel individuals to attempt great things.

Using this strategy, as an owner/manager of a small manufacturing company, you would load some of your product in the trunk of your car and stop at every retail outlet that will listen to you. Most of the time, the answer will be no. Sometimes, though, the people running the retail stores remember themselves having taken risks and engaging in the battle. The product will find its way into some stores. The hope is that the customer will buy it and the store will reorder. After enough trips, and given that enough stores are carrying your product, it is time to visit a wholesaler. The wholesaler, knowing that his/her customers are already buying your product, will then stock the product. This option is a horrendous method of short-cutting the distribution system. It sometimes works because you made it a personal challenge and enlisted the help of retailers.

3. The third option, if you cannot push your product or service fast enough through the marketing channels, is to go directly to the end consumer. Tell them about the product and encourage them to purchase it. This strategy is called the pull strategy. Final consumers will ask retail stores to carry the item. When retailers order, this "pulls" the product through the distribution channel. This method works very effectively, but it takes a lot of market research and a lot of money for promotional budgets.

This strategy might involve getting the public's attention with free samples. Mail the sample directly to them. Do a television commercial. Run glossy advertisements in magazines. Have glossy brochures to hand out. Put a great ad on the radio. This strategy might be possible if your customers are in a small geographic region, served by local television and radio stations.

The use of local media to pull your product through the channel will be too expensive for B-to-B products. Products used by another business can be pulled through the channel by direct mail to the target firms, by phone calls, Web advertising or personal visits.

Large firms that have been in business for some time can jump start sales of a new product through the pull strategy. Rather than wait for the gradual development of the market, it might be faster (and more profitable in the longer run) to both push and pull the product through the marketing channel. Large firms have the reputation and the money to get the attention of members of the distribution channel, to provide training or offer discounts. Large firms have the funding to send free samples via the mail system. They

have the **name recognition** with final consumers to make advertising and promotion effective, and they have money to afford advertising and promotion campaigns. They can run prime time ads and back up the national campaign with coupons in magazines and papers.

Even with such power in the marketing channels, however, many new products coming from large manufacturers still fail. Market research and test marketing can reduce the failure rate, but in the end, for the global corporation and for the small start-up venture, the *product* must fill a customer's need, it must be at the right *place* at the right time, it must be *priced* according to the value perceived by the customer, and it must be *promoted* in such a way that they know of its existence and desire it to fill a perceived need.

Business Communication and Advertising:

Businesses and organizations communicate in order to sell a product, belief, service, value or an image. They can do so in a one-way communication targeted toward a set of intended receivers. This is the advertising you see in magazines and on televisions. Businesses use many types of symbols to communicate the value of a product or service. Firms use logos, slogans, flags and architecture to advertise. Most of us recognize some company symbols, such as the "golden arches" of McDonalds. For most of us, company symbols imply some particular level of quality, either high or low. Businesses also use people as product symbols. These are the spokespersons that represent products. Jackie Joyner Kersey, a famous Olympic track star for instance, was a spokesperson for Nike. Her athletic excellence is intended by Nike to transfer to its products. Of course, having a person as a product symbol can be risky. Dennis Rodman became famous as a basketball start playing for the Chicago Bulls. Rodman made some disparaging remarks about Mormons during the 1997 championship series. Not only did the NBA fine Rodman $50,000, but Carl's Jr., which had used Rodman in some of its television ads, yanked him permanently from further TV ads.

In marketing, "promotion" is comprised of five elements:

- Advertising
- Public relations
- Direct marketing
- Personal selling
- Sales promotion

Advertising is any paid form of non-personal communication through mass media.

Public relations is directed at building the image of the company, and can be either paid or not paid. A common example of non-paid public relations is when a company gets a favorable story in a newspaper, magazine or TV. Larger companies have public relations departments that send press releases to media in the hopes of getting the stories aired or published. Companies will send new product information to appropriate media channel, hoping that the channel will review the new product and present a favorable story.

Direct marketing is when a person (receiver) gets a message through a non-personal channel, such as mail, magazine, television, newspaper, or computer and orders the product by mail, phone, or computer.

Most of us, growing up as mall shoppers, are quite familiar with personal selling. For a marketer, **personal selling** is communication in a setting where the seller can anticipate questions, or answer direct questions from the buyer. In personal selling, the seller and buyer are both sender and receiver. This is an interesting relationship, since, in some cases, the seller might not want to communicate certain information about the product, and might not "communicate" fully, or may falsely communicate. It is the buyer's task to communicate questions clearly and precisely, and to try to interpret the seller's messages accurately.

A **sales promotion** is any activity initiated for the short term to induce sales to any channel member or final consumer. Examples of sales promotion are coupons, rebates and price-off deals to final consumers. Quantity discounts to retailers or distributors are examples of sales promotions to channel members.

The five elements of promotion are often used together in an integrated marketing plan. Each element serves a specific purpose. Advertising creates product awareness, helps create sales, and builds a long-term image for a brand or company. Public relations help to build and maintain a positive company image over time. Sales promotion creates sales in the short run, and helps build **brand loyalty**. Personal selling allows a company to provide different levels of information to buyers, and to answer product-related questions. The more complicated or technical the product, the more important personal selling becomes. Direct marketing allows marketers to reach buyers who may be difficult to reach in other ways, or to reach them more cost-effectively.

To Promote Products, Beliefs, Services, Values, Ideas	
One-Way Promotion	**Two-Way Promotion**
Direct Mail	Phone
T.V.\Radio	On-Site Rep
Print Media	Off-Site Rep (ie Avon)
Internet	Internet
Packaging	
Video\Displays	

**** A combination of one-way and two-way promotion is effective. One-way introduces the product and sets the stage for two-way selling, (automobiles, dishwashers, televisions, life insurance, etc.).***

Some firms are using one-way communication but informing and answering often asked questions that might occur in a two-way promotion. These firms may provide small video monitors in retail outlets to demonstrate the proper use of their product as well as the product advantages to consumers. Self-service home repair and home improvement centers such as Home Depot and Home Base stores in the United States,

often install a manufacturer's monitor and video at the point where the product is purchased. This allows the manufacturer direct access to the end consumer interested in that type of product. The manufacturer has more time to promote the product than would be available in any media advertisement. And, the promotion hits a narrowly defined target market (in this example, customers in the store are interested in home improvement).

Video promotion is used extensively in trade shows where manufacturers and sales representatives promote their products and services to retail buyers. Tradeshow promoters rent a large convention hall and sell space (booths) to manufactures of products, distributors, and service providers. The tradeshow promoter then advertises the event to all potential retail buyers. The trade show is closed to the general public. There are so many buyers walking past a booth at any moment in time that talking with one potential buyer might loose the seller the opportunity to talk with a dozen other customers. The video helps inform the buyer who otherwise might not have the time to wait for a conversation with the seller.

Tradeshows are a major promotional vehicle, which allow new products to be efficiently promoted to potential retail buyers. Like shelf space in a supermarket, the prime booth space is very expensive and goes to established firms. Newcomers to the tradeshow often end up in remote corners of the coliseum building. Still, even a remote corner might be a better promotion technique than carrying samples around in the back of the entrepreneur's auto.

To lessen the potential fear a buyer may have of buying a product and having it fail, some firms are advertising on their product’s packaging that they have phone support. This one-way package advertising provides assurance to the buyer that if there is a problem with the product, two-way communication with the service provider or manufacturer will be possible. This process eliminates the cost of two-way communication except in cases where there is a real need to do so.

In starting a new firm, the entrepreneur seeking to promote the firm's service or product might hire a marketing executive or contract with a marketing consultant. The marketing executive or consultant might determine that most of the promotional effort should be directed into advertising. A person with specialized knowledge about consumer behavior, market research and advertising might be added to the promotional campaign team. The team will need to gather information from the firms they might use for their promotional campaign (radio, television, magazines, newspapers, billboards, catalogs, direct mail, etc.).

For new firms, it can be a difficult process to determine the value of advertising. Should a new firm spend money on advertising or spend the advertising budget on improving customer service? If the firm is entering an established and competitive market, advertising may be needed. If the firm has high fixed costs and needs to sell a large number of units as soon as they go into operation, then advertising is essential. If the firm has been able to differentiate its product or service and can financially tolerate a longer period of lower sales, it may depend on free word-of-mouth advertising (customers recommending the firm's service or product to their friends and associates).

Pricing

How does a business decide on a price to be charged for a product or service? There are three choices to base price on:

- **Cost**
- **Competition**
- **Demand**

Price Based on Cost:

What price should a manufacturer, wholesaler or retailer put on a product? It is common sense that in most cases the price needs to be higher than what it cost the firm to make or buy the product. The difficult part of the common sense approach to pricing is to determine what the cost is.

When a product is manufactured it will have a labor cost and a raw material cost. Each time a unit of product is made, the total cost increases proportionately. Assume 15,000 units are made at a total labor and raw material cost of $900,000. To determine the per-unit cost, divide the labor and raw material cost of $900,000 by 15,000 (the number of units produced). The answer of $60 per unit is called the **variable cost**. The total cost varies directly with the number of units made. If no units are produced, variable costs are zero. If 15,000 units are produced, variable costs are $900,000 in total or $60 per unit.

Should you charge something more than $60? Yes, you need to cover other costs, and make a profit. What if you offer your sales representatives $4.00 for each unit they sell? Add another $4.00 per unit to your variable cost. (Now variable cost is up to $64 per unit).

Unit Variable Costs

Variable Costs	$ 60
Sales Rep. Commission	$ 4
Total Variable Costs	$64

To set the price, suppose the president of a company decides to mark the product up 25% over variable costs. The price of the product would be $80, or $16 above variable costs.

$64 x 25% = $16
$16 + $64 = $80

The $16 difference between price and total variable costs per unit is called the **contribution margin**. This is the amount each unit "contributes" to paying other expenses such as **fixed expenses** (such as rent, salaries, and advertising) and profit, if there is any after expenses.

Unit Price, Variable Costs,
And Contribution Margin

Price		$ 80
Production Costs	$ 60	
Sales Rep. Commission	$ 4	
Less Total Variable Costs		$ 64
Contribution Margin		**$ 16**

Suppose we sell all 15,000 units that are manufactured for $80:
15,000 x $80 = $1,200,000

Total Sales Revenue	$ 1,200,000
Total Variable Costs	- $ 960,000
Gross Profit	**$ 240,000**

We have made $240,000 above total variable costs. This amount is called **gross profit**. The term gross profit refers to profit before expenses and taxes are accounted for. The key figure to look at from the stockholders point of view is not gross profit, but profit after expenses and taxes have been paid, called **net profit**. The firm can keep the profits after tax and have it invested in assets (called retained earnings). Or, if the profits are currently in cash, they can pay all or some of the profit out to stockholders in the form of dividends.

In order to operate our business and sell what we produce, we will incur other expenses, such as rent, advertising expense, and salaries. These are expenses, called **fixed expenses**, do not change in the short run, and do not change as a function of units produced. These types of expenses must be paid whether or not units are produced. For example, managers and rent must be paid even if no units are manufactured. Once a check is written for the cost of advertising, the money becomes a fixed expense, even if no units are produced.

Suppose you have the following fixed expenses:

Rent	$ 5,000
Manager's Salary	$ 50,000
Advertising	$ 50,000
Total Fixed Expenses	**$ 105,000**

Let's look at where we stand regarding sales revenues and all costs, both fixed and variable. This is shown in the income statement below. Step one is to determine gross profit (total sales revenues minus variable costs). Gross profit shown below is $240,000. Step two is to determine net profit by subtracting expenses and taxes from the gross profit:

Step 1:

$1,200,000 (sales revenues) - $960,000 (variable expenses) = $240,000 (Gross Profit)

Step 2:

$240,000 (Gross Profit) - 105,000 (fixed expenses) - 40,500 (taxes) = $94,500 Net Profit

Income Statement

Total Sales Revenue	**$ 1,200,000**

Production Costs	900,000		
Commissions	60,000		
Total Variable Expenses			**$ - 960,000**
Gross Profit			**$ 240,000**
Advertising		$ 50,000	
Rent		$ 5,000	
Salary		$ 50,000	
Total Fixed Expenses			**$ - 105,000**
Net Profit before tax			**$ 135,000**
Taxes 30%			$ - 40,500
Net Profit after tax			**$ 94,500**

Price Based On Competition:

Assume a marketing manager finds out that an established, competing firm is selling their units of a similar product for $76.

The President realizes that as a new company, they can't sell more products than their well-established competition, which has a good reputation and a cheaper price. Therefore, he/she may suggest lowering the unit price to $74. If price is lowered, the unit contribution margin goes down. This leaves less money for covering expenses and squeezing out a profit. How many units must be sold so the company does not lose money? What we want to find is the point at which revenues from sales and costs (variable costs and fixed expenses) are equal. This point is called the **break-even** point. Selling additional units beyond this point will give us a profit.

We know that if we sell one unit at $74, we have a Contribution Margin of $10 to cover Fixed Expenses. This is summarized below:

Price		$ 74
Production Costs	$ 60	
Sales Rep. Commission	$ 4	
Less Total Variable Costs		$ 64
Contribution Margin		$ 10

To find out how many units a firm must sell to break even, divide the total fixed expenses by your contribution margin. The result will be the number of units you need to sell to break even:

Total Fixed Expense divided by contribution margin = break-even point
$105,000 / $10 = 10,500 units

Let's look at the proof of this. Examine the sample income statement below, which shows 10,500 units sold at $74 per unit.

Income Statement

Total Sales Revenue		**$ 777,000**
Production Costs	630,000	

Commissions	42,000		
Total Variable Expenses			**$ - 672,000**
Gross Profit			**$ 105,000**
Advertising	$	50,000	
Rent	$	5,000	
Salary	$	50,000	
Total Fixed Expenses			**$ - 105,000**
Net Profit (loss) before tax			$ 0
Taxes 30%			$ 0
Net Profit (loss) after tax			**$ 0**

Therefore, in the example above, if you sell 10,501 Units, your company will have made a $10 profit.

The President in our scenario responds, "Well darn, lets make the whole 15,000 and sell them at $74 each. All we need to sell is 10,500 units. On unit number 10,501 we start making a profit!"

The finance officer chokes at that comment, as does the marketing executive. The finance executive is the first member of the team to regain composure. "We don't want production to get too far ahead of sales. If we make 15,000 units and only sell 11,000 we will have a profit, but we will also have 4,000 units, costing a total of $240,000, sitting in inventory. That is 4,000 x $60 or $240,000 we have in product instead of cash. I don't think we can handle that kind of investment for very long."

The President then turns to the marketing member of the team and asks, "How many units can you sell?"

Regaining composure, she responds to the question. "At $74, we will have priced over cost and we will have priced under our long established competition. We will win over some of the competition's clients based on price alone. We also have better quality and better service but it may take some time to prove we have a different product that is better."

Making a product or service that is somehow different from that of the competitors is called **product differentiation**. If successful in differentiating your product or service, pricing can then move away from that of the competitor. Product improvements and better quality standards are a good way to differentiate. However, sometimes advertising can build an image of a product being better differentiated than what actually exists.

The firm that has been able to differentiate its product has the option to not raise its price, but to keep the price near that of the competitor. The strategy in doing this is to gain more **market share**. Market share is the percentage of the market you service.

If Coca Cola can make itself seem better or more desirable than Pepsi through advertising, do you think Coke would raise price, or attempt to get more market share?

Price Based on Demand:

In our scenario, the firm has determined that $74.00 will "beat" the competition, resulting in the firm gaining some of the competitor's market share. Even at $74, the firm can produce a profit if 10,501 units or more are sold. The marketing manager needs to

forecast demand for their industry and then estimate the firm's market share within that industry given the firm's price of $74.

The estimation process is in two stages. First, the firm must estimate demand for the entire industry. That is, how many people in a given market will want the product being sold by the industry? This is difficult to do, even with good historical data. Hopefully, an industry association representing all the firms in that industry has been collecting data. In addition, financial firms such as banks, credit agencies and stock market related firms might have data.

Once industry demand has been forecast, the firm must estimate what its share of industry demand will be at a price of $74. How does price affect customer demand? If they charged $72.00 would the firm get a lot more market share? If they charged $75.00 would they lose many customers?

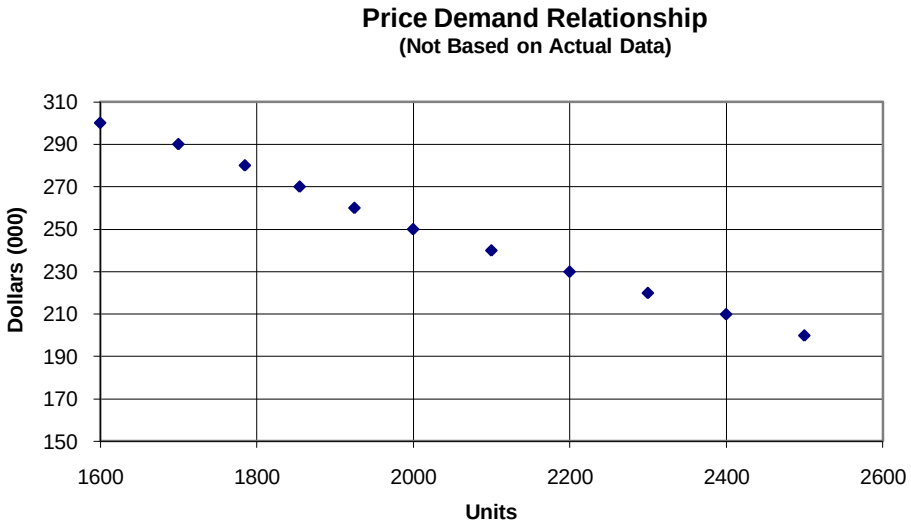
Demand is a function of many items. Demand is dependent on each of the 4P's. Is the product acceptable? Is it in the right place at the right time? Has it been well promoted? Is it priced right? Price is unique among the 4P's. It is the only variable that makes money. The other 3P's cost money.

Economists study the relationship of demand and price, and these relationships are presented in economic and marketing classes. The **price/demand** concept is simple, but securing reliable data to produce useful information for decision-making is sometimes difficult. That does not mean the decision-maker should disregard the price/demand concept when setting price.

Let us establish a demand curve for a new car. An automobile you might consider is a Lambourgini. It sells for about a quarter of a million dollars. **Exhibit 5** represents the relationship between price and demand. We will start with a base price of $250,000. If the dealer raised the price by $10,000 do you think demand would fall?

The answer is yes, but not by much. A few of the poorer rich would not be able to pay the extra $10,000. What if the dealer kept raising price by $10,000? What if the dealer lowered the price in $10,000 increments? Would there be more buyers at $200,000? While there would probably not be a long line of people wanting to buy, a few more customers might come in to inspect the automotive piece of art. We might expect the demand at each price level to be as follows:

Exhibit 5

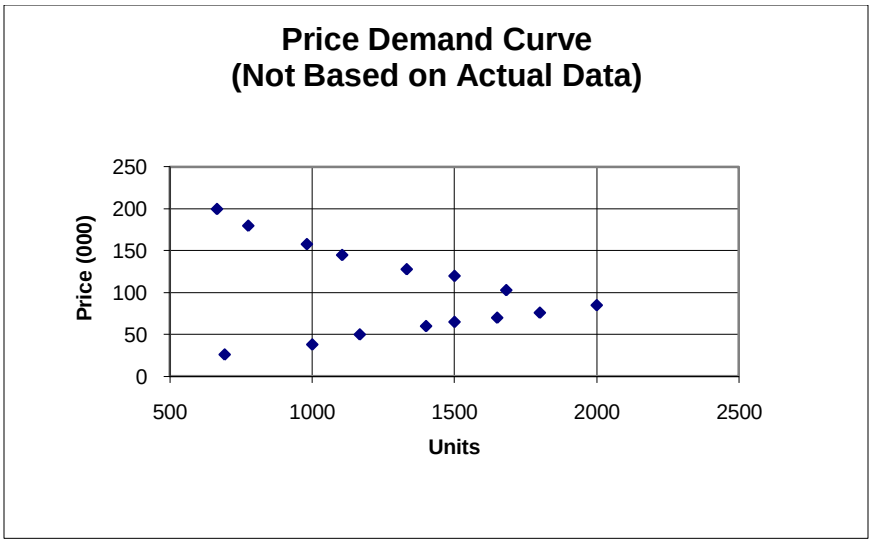


At some level, customers might sense the price is just too outrageous and represents a snob statement rather than an expression of appreciating luxurious, automotive art. On the lower end, if the price dips too low, richer clients would not see the vehicle as an elite, expression of high-speed art, but simply as another high-powered luxury sports car in an already crowded market.

Thus, the demand curve for this rare sports car might be one of the most unusual in business. What other products might have a price/demand relationship expressed by the curve in **Exhibit 6**? Do you think the more expensive lines of perfume might have a similar curve (using, of course, different dollar increments on the vertical axis)? What about designer clothing or shoes? Someone willing to pay $200 for a pair of tennis shoes probably would not buy that pair of shoes if just anyone could buy them. Therefore, if that $200 pair of shoes was priced at $35, the shoe company may lose the elitist clients in exchange for the price-conscious consumer. Sales may be equally low at both price extremes if people would be willing to pay just $20-$50 more than the lowest-priced shoe to buy a slightly more popular brand of shoes.

Exhibit 6

When Price Determines Image Rather Than Product Features



When the slope (or angle) of the line representing demand is fairly steep, a price change can be made with little repercussion on units sold. This also means that if price is lowered, it will not generate many additional unit sales. Using a 10% off sale in an attempt to sell many more units will not work. This type of curve is defined as **inelastic**. No matter what happens to price, unit sales do not "stretch out" very far.

When the slope of the line is moderate to flat, a change in price can have a major impact on demand. This would indicate that price is **elastic**, or will stretch unit sales a long way, given a small change in price.

Exhibit 7

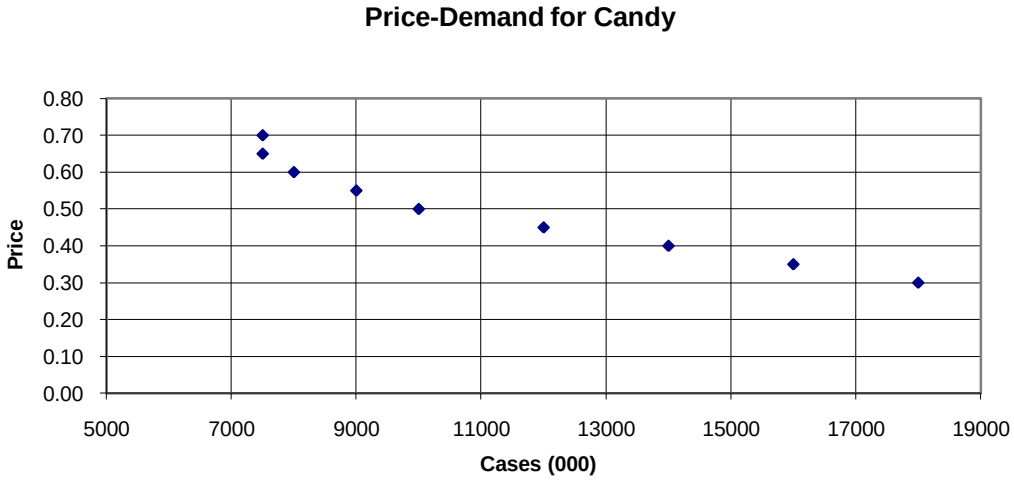
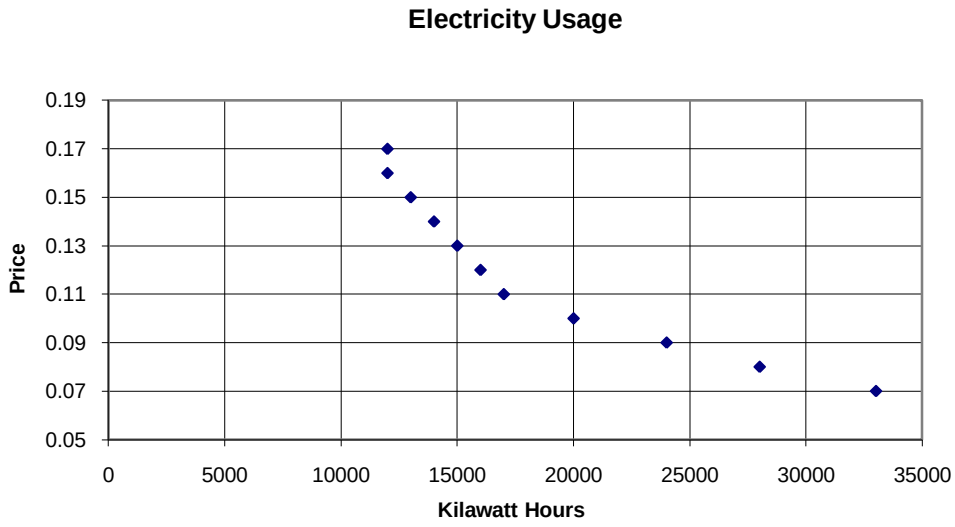


Exhibit 8



Most price/demand relationships are linear (straight line) over *limited* ranges. **Exhibits 5** and **6** show curved relationships as price moves into *extreme* ranges. Examine the **Exhibits 7** and **8**. We have identified two products with unusually curved demand functions. What products do you think fit into the inelastic and elastic price/demand model?

Back to our scenario, assume the marketing manager obtained market research data that measured the current price/demand relationship as being very elastic. From the data, the marketing manager estimated that at $74.00 per unit the firm would sell 11,000 units. But, since the demand is so elastic, if the price were $70, the marketing manager expects they could sell 15,000 units in total. The choice is 11,000 units at $74 or 15,000 units at $70.

What is their profit at $74 and what is it at $70?

$74 x 11,000 units = $814,000 total sales revenue

$70 x 15,000 units = $1,050,000 total sales revenue

But remember this does not take expenses and taxes into account.

814,000 - 704,000 (variable costs) - 105,000 (fixed costs) = $5000 net profit before tax

1,050,000 - 960,000 (variable costs) - 105,000 (fixed costs) = - $15,000 net loss

In this case given the fixed and variable costs, the business would be better off selling fewer units at a higher price.

It is important to consider all aspects of pricing including cost, competition and demand. Reliance on one aspect alone might have the executive team miss a coming threat or an opportunity.

Pricing can be viewed in the short run and longer run. We have viewed it only in the short run in our discussion here. If one thinks strategically, the question should be asked, "What will the reaction of our competitor be?" If the lower price generates new demand and does not simply "steal" the competitor's clients, then the competitor might not do anything. Or the competitor might lower price and also earn new customers and not take yours. That is the assumption in this case. But, if the new demand does not materialize according to the estimates, and if the sales made by your firm came from stealing your competitor's customers, the competitor will likely retaliate by meeting or beating your price.

This move runs the risk of a price war, where firms compete for customers by lowering price. This could continue until both firms come to their senses, one gives up, or one goes bankrupt.

Every action by a firm invites a reaction. Possible reactions must be thought through carefully before decisions are implemented. Some executives and individuals in their personal lives carry this action/reaction thought process to the extreme. They analyze every possible reaction. Such thorough analysis can lead to two problems if carried to the extreme. First, so many negative reactions might be listed that good ideas are rejected. Ideas should not be rejected because something might go wrong. They should be rejected only when the expected value to be gained is not worth the pain or cost of failure. The gain sought must be worth the risk taken.

Second, some individuals spend such excessive amounts of time studying a problem and the options to solve it, that they never take action, or perhaps fail to do so in a timely manner. Before enormous amounts of resources are spent analyzing a minor problem, review the cost of improving the odds of making the perfect decision versus the consequences of making a poor decision. It might not be worth much in terms of time or money to avoid making a poor decision. In other cases, some problems are worth a lot of time and money in order to avoid a poor decision.

Executives and individuals should consider the value attached to the quality of the decision in each situation. Some individuals cannot accept making poor decisions, as it reflects on their personal egos. For these persons, the quality of their decision-making must be consistently high. They may make fewer mistakes but they will make far fewer decisions. Are actions in your personal life and in your career based more on productivity or more on avoiding mistakes (quality)?

Pricing Using Margins:

A typical way to calculate prices at various stages in the distribution channel is by using **markups** or **margins**. These words are usually used interchangeably and refer to the percentage increase or decrease in price between different channel members.

There are generally two ways to compute margins: retail price, or the cost of the product. The retail price method is often used when competing products limit increasing the retail price. In this case, channel members will each take their standard markups. The manufacturers will have to live with the resulting price at which they can sell the product to other channel members. If the resulting price is too low to allow for a reasonable profit, the product will have to be changed, dropped from the line or perhaps differentiated through an advertising campaign.

Manufacturers and providers of services that have successfully differentiated their products have gained marketing power in the distribution channel. Since the market demands the product, the manufacturer can price on a cost basis (cost includes profit). In this case, the margins are computed on a cost basis as the product moves up through the distribution channel, starting from the manufacturer and ending with the retailer.

Presented next are examples of how margins are computed when retail price is used as the starting point in the channel. This is followed by examples of computing margins when manufacturing cost is used as the starting point in the channel.

Margins on Retail Price:

As an example, let's assume that you are a manufacturer of athletic shoes. You sell your shoes to specialty shoe stores. The stores you sell to require at least a 40% margin (markup). Suppose the retailer is selling your competitor's shoes at retail for $100. What price can you charge the retailer and remain competitive?

The manufacturer's price can be quickly calculated from the following formula:

Retail Price x (1 - % markup*)*

$100 x (1-.40) = Manufacturer's Price

or

$100 x .60 = $60

Retail price	$ 100
Retailer keeps	$ 40
Manufacturer receives	$ 60

As the manufacturer, your price to the retailer would be $60. If the retailer then took their standard 40% markup, your product would sell in their stores at a price of $100, which would match your competitor's price.

What if you cannot convince the retailer to carry your shoes? One option is to have a distributor handle your line of shoes. The distributor probably has the shoe store as a customer already. With this method your shoes have a better chance of acceptance. As an example, imagine that the distributor requires a margin of 7% for this service. The distributor takes title to the shoes (buys the shoes from you, the manufacturer), and sells to as many shoe stores as possible. The decision you, as the manufacturer, must make is, should the 7% come out of your $60 or should the cost be added to the $60. If you have not been able to differentiate your shoes from the competitor's shoes, you will have to absorb the 7% distributor cost.

Using the formula above, calculate how much you, the manufacturer, get for a pair of shoes sold to the distributor, if you take the 7% out of your $60:

Distributor's price x (1-% markup)

$60 x (1-.07) = manufacturer's price

or

$60 x (.93) = $55.80

Retail price	$ 100.00
Retailer keeps	$ 40.00
Distributor keeps	$ 4.20
Manufacturer receives	$ 55.80

The distributor pays you $55.80 for a pair of shoes, and sells the shoes to the retailer for $60. In this situation, the consumer and the retailer are not affected by adding a distributor to the distribution channel. The retailer simply sends the $60 check to the distributor instead of the manufacturer. It has cost you, the manufacturer, $4.20 per pair for the services of the distributor.

Margins on Manufacturer's cost

Presented below are the retail prices when the manufacturer takes a markup on cost (cost includes their profit). In this case, the manufacturer must have $60. If you sell direct to the retailer, using $60 as the base price, the retail markup formula changes. Assume that you sell direct to the retailer. If the retailer still wants 40% of the retail price, how much will the consumer pay? If we start at the manufacturer's level, the markup formula changes to:

Manufacturer's price divided by (1-% markup) = retail price

$60 divided by (1-.40) = retail price

or

$60 divided by (.60) = $100

Retail price	$ 100
Retailer keeps	$ 40
Manufacturer receives	$ 60

Prices have not changed from our first example. The manufacturer gets $60, and the retailer keeps $40, after selling the shoes for $100.

What happens when you include the distributor, who wants 7% based on his selling price to the retailer. In this example, the manufacturer's price to the distributor is $60.

Manufacturer's price divided by (1- %markup)

$60 / (1 - .07) = distributor's price

or

$60 / .93 = $64.52

Distributor's price divided by (1 - % markup)

$64.52 / (1 - .40) = retailer's price

or

$64.52 / .60 = $107.53

Retail price	$ 107.53
Retailer keeps	$ 43.01
Distributor keeps	$ 4.52
Manufacturer receives	$ 60.00

To keep the formulas straight, think of "dividing up" the margins when calculating prices from manufacturer to retailer. That is, always "divide" going up the channel and multiply going down the channel.

So, now that we have gone through calculating prices moving up and down the channel, which formula is better? One way of calculating price will mean the consumer pays $100 dollars, and the other way means the consumer will pay $107.53. If you are the consumer, you like the first way. If you are the manufacturer, you like the second way. The answer is based primarily on competition. If your shoes are about the same as the major competitors' shoes, for which consumers pay $100, then you might have to price no higher than $100. But if your shoe is of a higher quality or offers some unique features, you might be able to price higher than competitors. In this case you could charge the $60 dollars per pair to achieve your profit objectives, and consumers would pay $107.53.

Margins on Cost:

In some industries it is traditional to price at some margin above what it costs to manufacture the item for sale. That is, the buyer agrees to the contract without knowing the final cost. Cost will be the contractor's unknown cost plus a known margin. Construction is one such industry. Defense is another. The technique of pricing on cost is easier than the retail pricing we just looked at.

Assume that you are a builder of residential housing. You typically charge 10 percent above the costs of construction for building a house. Suppose it costs you $200,000 to build a house. How much will you charge for it? The formula for determining price based on cost is:

cost + (% margin x cost)

$200,000 + (.10 x $200,000) = $220,000

Pricing on cost reduces some risks to the manufacturer. For example, if lumber prices or wages increase during the construction of a house, these costs plus a 10% markup on the cost can be passed on to your buyer.

In the situation where you had contracted to build a house, your buyer might not be willing to pay both the cost increase and the 10% markup on these additional costs. If the bid and resulting contract did not allow for cost increases, you, as the contractor must assume the additional costs. If cost increases can be passed on to the client, the contractor might forgo the 10% markup on the new costs and just pass the costs on without the 10%. Whether the contractor can enjoy 10% on the additional cost increases depends on the bid and resulting contract. The initial bid and contract pricing agreements

are based on existing price/demand relationships. If the buyer has few bidders and if the buyer can't delay the project, the contractor can write the contract in his/her favor.

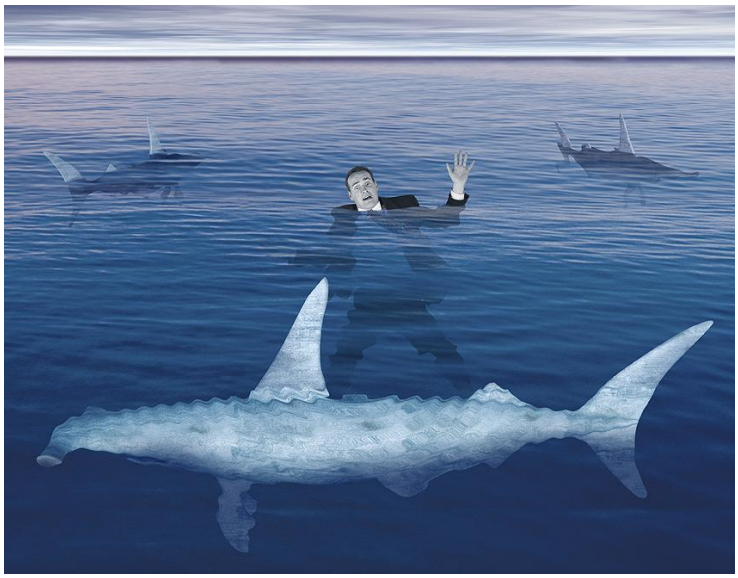
- If the contract has no provision for control over cost, it is more money in the contractor's pocket if they can drive up costs. The concept of pricing on cost makes one wonder what margins or lack of cost control some defense contractors use when they charge $150 for a standard wrench or $600 for a toilet.

Key Words:

- 4 P's
- Advertising
- Agents
- Brand Loyalty
- Break-Even
- Brokers Competition
- Commission
- Contribution Margin
- Cost
- Demand
- Direct Marketing
- Distribution Channel
- Elastic
- Fixed Expenses
- Gross Profit
- Inelastic
- Infrastructure
- Inventory
- Manufacturers
- Margins
- Market Share
- Markups
- Name Recognition
- Net Profit Personal Selling
- Place
- Price
- Price\Demand
- Product
- Product Differentiation
- Promotion
- Public Relations
- Push Strategy
- Pull Strategy
- Sales Promotion
- Sales Representatives
- Subsidize
- Undercapitalized
- Variable Cost
- Wholesaler
- Working Capital

Chapter 5

Marketing Strategy



This chapter discusses marketing strategy and its role in setting competitive marketing actions of the firm. Well thought out and clearly stated strategy is necessary for business success. Strategy gives a firm direction. Without direction, a firm has no clear course for designing marketing programs, and has no useful way to measure results.

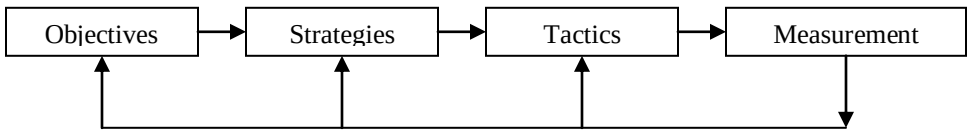
MARKETING STRATEGY

Interestingly, a dictionary definition of strategy is *generalship, or the art and science of war in planning and directing large military movements and operations*. Looking back several thousand years, military commanders had strategies for dealing with opponent armies. About 2500 years ago, a Chinese general, Sun Tzu, wrote what is now a well-known book among military thinkers, *The Art of War*, in which he set down rules for successful military actions. Principles in this book (as well as writings by other military thinkers) have been cited by some business people for their application to successful business planning. In fact, some businesspeople think of running a successful business analogous to waging war on competitors. They may use such terms as, "taking no prisoners," or "conquering" a competitor. In fact, war drove the development of techniques for leadership, organization, and competition. For example, Sun Tzu says that if you know the enemy and know yourself, your victory will not stand in doubt; if you know Heaven and know Earth, you may make your victory complete. The business application of this strategy is to know your competitor's strengths and weaknesses and know your own firm's strengths and weaknesses and to know the competitive environment of the industry. Sun Tzu also stated that just as water retains no constant shape, so in warfare there are no constant conditions. He who can modify his tactics in relation to his opponent and thereby succeed in winning, may be called a heaven-born captain. The business application of this strategy is that business conditions are always fluid, always changing. The firm must continually change its tactics in relation to those of its competitors in order to succeed.

For marketing purposes, we can think of strategy in terms of setting a *direction* for competing and of *combining the resources* of the firm to achieve a marketing objective. A firm without a clear direction for competition is likely to fail. As Alice, in the book Alice in Wonderland said, if you don't know where you are going, any road will take you there. Likewise, in business, if you don't know where you want to go, any plan will take you there. But, you might not like where you end up. Combining marketing resources means using the elements of the marketing mix – the product itself, price, promotion (and advertising) and place (distribution) to achieve some marketing objective.

Exhibit 1 shows the relationship between objectives, strategies and tactics of a firm.

Exhibit 1



We can think of the objectives as the "**what**" a firm wants to accomplish, the strategy as the "**way**" to achieve the objectives, and tactics as the "**how**" to achieve the objectives. Objectives are the measurable outcomes a firm wants to achieve. For

example, suppose a shampoo manufacturer wants to increase its share of the market by 5 percent in the next year; or increase sales by $2 million. These objectives are easily measured.

Strategies are general statements about the way the firm plans to achieve objectives. For example, to increase market share, the manufacturer might adopt a low price to encourage consumers to try the product and make repeat purchases. It might also increase the distribution by getting more retailers to carry the product.

Tactics make up the program for implementing the strategies. Tactics describe specific actions. To implement the low price strategy, the shampoo manufacturer might decide to lower price to retailers by 5 percent. It might also implement coupon program giving consumers 50 cents off the retail price of the product. To encourage new retailers to carry the product, the firm might have to design special displays for retailers' shelves. The tactics would specify what the displays will look like, how much they will cost, and how they should be placed in stores.

Measurement involves assessing whether the firm is achieving its objectives. Measurement can be done at different points in time – monthly, quarterly or annually, or example. This allows management to determine whether objectives have been met, and to consider what actions to take if they have not been achieved. Suppose the firm saw market share increase only three percent. Management would need to re-examine its objectives, its strategies and its tactics. Perhaps, during the year, competition increased substantially and it became unrealistic to expect share to increase by five percent. Therefore, management might change this objective.

Exhibit 2

Objectives, Strategy and Tactics

Objective (what)	**Strategy** (way)	**Tactics** (how)
Increase Market Share by 5% within the next two years	**Product**: design a new product for the market	Develop a new shampoo/conditioner targeted "outdoors" market. The product will be high quality and provide protection against effects of wind and sun.
	Price: • Low (introductory) price during product introduction • Offer low price to new retailers	• Price at $10.95 for 12 oz., which is 7%below the current product to encourage trial and repeat purchase. • Offer new retailers a 10% discount on their first three purchases.
	Promotion and Advertising:	
	Promotion: • Coupon program • Retail Support program	• $.50 off price coupon in Sunday newspapers in 10 largest metropolitan areas when product is introduced. Offer coupons for four weeks. • Provide shelf displays to the current top retailers (those that do 80% of sales). Install displays two weeks before advertising and coupons come out.
	• Advertising • Retail cooperative advertising program	• Grant top retailers (those that do 80% of sales) 50% cooperate advertising allowance beginning one week before the roll out of our new product. Allowance will last for six months.
	• **Place** (distribution) • Increase number of retail outlets	• Add 50 new retail distributors within the next two years. These should be in major metropolitan areas, and should have beauty aid/supply sales of at least $200,000 year.

Or, maybe the strategy was faulty. Perhaps the best way to get more market share would be to change the product, not lower price. Maybe the current product is not what the consumer's desire, and a lower price does make a difference. Finally, the tactics might not have been implemented well. Maybe the company did not meet with retailers

often enough to give them good support. Perhaps the retail displays were not attractive and did not catch the eyes of consumers. Typically, marketing strategy and tactics (implementation) would involve consideration of the entire marketing mix: product, price, promotion and place (distribution). **Exhibit 2** gives an example of the relationship between objectives, strategies and tactics.

There are many types of marketing strategy – for entering markets, for defending markets, for withdrawing from markets and many more. There are entire books written about marketing strategy. However, a basic way to think about strategy is shown in **Exhibit 3**. This describes approach to looking at "generic" or very broad strategies. The exhibit shows for generic strategies, or broad ways marketers might think about gaining and maintaining a competitive advantage in the marketplace.

Exhibit 3

Competitive Advantage*

Competitive Scope	Lower Cost	Differentiation
Broad Target	Cost Leadership Strategy	Differentiation Strategy
Narrow Target	Cost Focus Strategy	Differentiation Focus Strategy

*From Michael Porter, *Competitive Strategy*, New York Free Press, 1980

As shown in **Exhibit 3**, a firm can choose to concentrate on being a cost leader, by adopting strategies that allow it to produce at lower costs than its competitors. Low costs enable the firm to make higher profits, or to sell at lower prices to its customers. Or, a firm might choose to compete primarily based on differentiation of its products from those of its competitors. It might have unique product design or unique product quality. Each of these major strategies can be focused on either a broad market or a narrow market (defined in terms of consumer mix or geography). A more detailed explanation of these strategies is shown in **Exhibit 4.**

Exhibit 4

Porter's Four Generic Strategies

Cost Leadership:

Cost leadership comes about several ways. One way is to build large plants, allowing the firm to experiences efficiencies in production. Cost leadership can also result from tightly controlling costs such as overhead, distribution (through efficient distribution methods), and avoiding markets that do not return good profit relative to costs of doing business.

Differentiation:

This strategy entails creating a product that is seen as being unique in the industry. Differentiation can come about through product design, distribution, customer service, technologies or other ways of making the product or its offering appear unique to customers.

Focus:

Focus means concentration on a particular group of buyers or on a particular geographic segment. For example, a firm might choose to concentrate on the female market, or on the age group 18-24. Some firms focus on high-income groups only. Or, a firm might focus geographically. Instead of trying to sell nationally, a firm might choose to sell regionally, or only in the larger metropolitan markets. The assumption of the focus strategy is that a firm can be more successful selling to a smaller market than to a larger market. This might be particularly true of small firms with more limited resources. In a cost focus strategy, the firm seeks to be a low cost leader in its target market, while with a differentiation focus, a firm seeks differentiation within its target segment. For example, a shampoo manufacturer might want to focus on the outdoors market for people 18-34 years of age. It might develop unique (differentiated) products for this market.

Key Words:

- Competitive advantage
- Cost leadership
- Differentiation
- Focus
- Objectives
- Strategy
- Tactics

Appendix A:

The First Trial Decision

In this first trial decision, the emphasis of your decision-making will be the 4 P's of marketing:

- Place
- Product
- Promotion
- Price

Place

The first of four P's to consider is Place. Your team will need to decide if the firm will sell just in Area 1, Area 2, or both Area 1 and 2. For the purposes of this first trial decision, since you are purely gathering information, we recommend that you sell in both areas. The decision to sell in both areas will increase your team's knowledge about the environments in which your firm might operate.

Product

The second of the four P's your team will need to decide on is Product. Product is the life of your company. Without product there are no profits to be made and certainly no reason to be in business. Your firm needs to order products (also called finished goods) in large quantities from a manufacturer and then resell the product in smaller quantities to professional retail store buyers. You must order product for your first real decision. You must also order product for your first trial decision, which provides you a learning opportunity without risk. How many units (also called cases) should your firm order and how do you go about processing the order? These two important questions are answered below.

Determining How Much Product to Buy:

Forecasting demand will give your firm an estimate of the units to order for each product in each area. Forecasting is essential to marketing and must be done after each quarter's results are available. For your first trial decision, your firm has no history and thus no previous quarterly data. Two important pieces of information will be provided to allow for a "rough" estimate of quarterly demand for your products in each. Keep your estimates and measure how close you came to the actual numbers when results are released.

Do not destroy the trial run forecasts or the actual quarterly results even if it is a trial run. The market research data you gathered in the forecast and the actual trial run will be of great value when forecasting demand for your product in the first real set of decisions.

The two important pieces of information to help with the trial run forecast are:

- Average number of units sold per type, per area for the entire market group in the quarter just ended (which you did not participate in but for which information is available).
- Your teams vision for the firm's market share per product per area.

The total number of units sold by all firms in a given market group will vary greatly by market group once the non-trial decisions begin. Each firm has an incredible impact upon their market group. If all firms in a given market group spend large amounts of money on advertising each quarter, total sales in that market group will increase greatly each quarter. In a market group where firms (on average) are spending very little on advertising, growth in total sales for the group will be very slow. Most likely, market groups will contain firms that spend a lot on advertising each quarter and firms that do not. In any case, total unit sales each quarter will be different for each market group, depending on the number of firms competing and how they elect to compete within that market group.

To begin the simulation, all market groups will begin with the same potential for total unit sales because firms have not yet had a chance to influence the market group with their decisions. Determine the current quarter in which your firm will be making its first trial decision (Q1, Q2, Q3, Q4 are each 1/4 of a year with Q1 being the January, February, March season). You can find this information at your program page. Next, use the table below to find the total unit sales potential for each market group. As you can see in the chart below, the seasonal demand varies sharply depending on the quarter. You will have serious forecast errors if you fail to match the information from the table below with the appropriate quarter you are making decisions for.

Total Unit Sales Potential for Each Market Group By Product/Area Per Quarter

	A1P1	**A1P2**	**A2P1**	**A2P2**
Quarter 1	12,500 up to 18,750	30,000 up to 75,000	10,000 up to 15,000	30,000 up to 75,000
Quarter 2	25,000 up to 37,500	15,000 up to 37,500	20,000 up to 30,000	15,000 up to 37,500
Quarter 3	12,500 up to 18,750	15,000 up to 37,500	10,000 up to 15,000	15,000 up to 37,500
Quarter 4	50,000	40,000	40,000	40,000

	up to 75,000	up to 100,000	up to 60,000	up to 100,000

By now your team should have completed a rough draft of the vision statement. In the vision statement or related objectives, your team should have defined the percentage of the total market you will attempt to capture (for each product in each area you elect to sell in). Based on the desired market share percentage(s) and the information in the above table, your team should prepare a sales forecast for the first trial decision.

In the table above there is a large range between the low and high estimates for total unit sales potential for both Product 1 and Product 2. Your firm will need to consider risk tolerance when selecting a number within the range. If your firm is risk-averse, use the lower end of the estimates in the table. If your firm is willing to take a larger risk, use the higher end of the estimates in the table above. If your firm is only willing to take on a moderate amount of risk, use some number between the low and high estimates in the table above.

For any one product in any one area, estimate the total number of units your firm should order using the following formula:

Desired Market Share as a Percentage
X
Total Unit Sales Potential from Table

Example: It is Quarter 2. The vision statement for *Firm A* stated that they planned to capture 20% of the market share for Product 1 in Area 1. *Firm A* is not willing to accept much risk in their pursuit of return. Therefore, *Firm A* used the low end estimate for total unit sales potential for A1P1 listed in the table.

20% x 25,000 = 5,000

Based on this calculation, *Firm A* would place an order from a manufacturer for 5,000 units of Product 1 to be delivered to Area 1 for their first trial decision.

It is Quarter 2. The vision statement for *Firm B* also stated that they planned to capture 20% of the market share for Product 1 in Area 1. *Firm B* is very aggressive and willing to accept risk in order to achieve their vision. Therefore, *Firm B* used the high end estimate for total unit sales potential for A1P1 listed in the table.

20% x 37,500 = 7,500

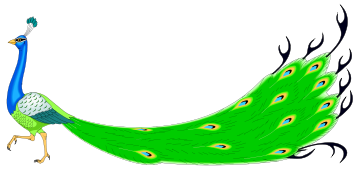
Based on this calculation, *Firm B* would purchase 7,500 units of Product 1 for delivery to Area 1 for their first trial decision.

In the example above one can see how a firm's risk tolerance affects decisions. Be sure your team has discussed and reached a general consensus about the firm's risk tolerance.

How to Purchase Product

Once your team is entering NON-trial decisions, you will have the option of ordering product from manufacturing firms managed by teams at the Advanced level of the simulation. For the two trial decisions you will need to contract with Peacock Industries to purchase your Finished Goods. An order must be entered for each product delivered to each area. Thus, if you were to enter decisions to market both products in both areas, you would need to place four separate contracts to purchase units. You must order units from Peacock for the two trial runs. Before we continue with the ordering process, we need to discuss the manufacturer known as Peacock Industries

Peacock Industries:



Peacock Industries is an administratively run supplier. Peacock produces finished goods for all of the market groups. Orders for product will almost always be filled. Supply is not, however, 100% reliable. Keep an eye on the news to make sure that Peacock Industries is continuing to operate smoothly.

Note: Peacock Industries sells only finished goods. Do not attempt to make other types of contracts with this firm.

Peacock Prices

Your firm's simulated industry is the Scent Industry. All firms that place orders with Peacock Industries will do so using the following contract identification number:

- **Introfirm 18**.

When you enter the contract you must enter the firm you will do business with, in this case Introfirm 18. You must specify the price of the product. The prices are listed below. Peacock will not negotiate price. Prices for the trial run are:

- **$80 for Product 1**
- **$115 for Product 2**

Once the non-trial decisions begin, Peacock's prices change each quarter. Before entering contracts with Peacock, always check the current Peacock prices listed in the *Dollars and Scents Quarterly (*linked as "News" from the Globalview homepage). Contracts entered with Peacock below Peacock's price will be cancelled or restated with an additional charge to correct the contract. Contracts entered with Peacock above Peacock asking prices will be accepted at the higher rate. You can buy an unlimited amount of product from Peacock at Peacock's asking prices. You do not need to negotiate with Peacock Industries for quantity or price. It is not necessary to seek

permission from Peacock to enter a contract with them (very different than working with Advanced manufacturing firms). The contract requires you specify the where the freight company should pick up the product and the area where it should deliver the product.

- **Ask private manufacturing firms to specify the pickup area**
- **For Peacock, always enter A1 (area 1) as the pickup area.**

Making Your Contract

You will need to enter a contract for the total number of units your firm wants to sell in this first trial run, by product and by area. If your firm has decided to sell both Product 1 and Product 2 in Areas 1 and 2, you will need to enter a total of 4 contracts:

- A1P1 (Area 1 Product 1)
- A1P2 (Area 1 Product 2)
- A2P1 (Area 2 Product 1)
- A2P2 (Area 2 Product 2)

If your firm has decided to sell both products but only in one area, then you would only need to enter two contracts. If your firm has decided to sell only one type of product in one area, then you would only enter one contract. For specific instructions on entering a contract with Peacock, follow the directions and examples below.

Contracts Run Time

The contracts program runs before the main Global View firm decisions. This method of processing allows your firm to order product and sell it in the same quarter. That is the good news. The bad news is that all contract related transactions occur prior to the decisions entered. This means your cash account is reduced immediately to pay for your contract purchase(s). In your first trial run and your first real run, you will order finished goods and not even have a checking account. The good news is that the bank will cover your purchases even if you have no money in checking. The bad news is that the bank classifies the loan as a "special loan" and charges an outrageous fee.

*Special $$ Tip: Always avoid special loans if at all possible. Plan to have enough money in your checking account when you get the results back to cover your finished goods contracts for the coming quarter. To pull this money saving technique off, marketing should be forecasting the need for product a quarter ahead so finance can get the money ready to pay for the finished goods.

Special Loans

Special loans cannot be avoided in the very first quarter of operation because of the contracts run time. In future quarters, special loans *can* be avoided with careful planning. The finished goods are shipped as soon as you hit the execute button on the contracts

program. The finished goods are shipped **COD** which means **Collect On Delivery**. The problem in the first quarter is that the stock has not been sold by the time the goods arrive. The simulation automatically allows the bank to handle the order as a letter-of-credit. The bank provides the COD funds plus $10,000, as a beginning special loan at an interest rate of 36% annually. That is 9% per quarter, which is well worth making sure that your firm always has money in the cash account to cover future contract purchases.

Should you wait to buy finished goods until you have your own money? NO! Just be sure you price your finished goods high enough to cover normal costs, pay the additional 9% banker fee and make a profit.

Promotion

The third P to consider when making your first trial decision is promotion. All promotional decisions affect the image and quality of your product(s). Your team can pick one marketing strategy for all products your firm will sell, or the team can have a different marketing strategy for each product being marketed in each area. The promotional decisions (pricing is in the next section) are:

- Advertising budget (each product, each area)
- Size of sales force (each area)
- Size of sales force in training (general for both areas)
- Salary for sales force (per area)
- Commission for sales force (per product, per area)
- Credit policy for buyers (both areas)
- Quality control budgets (per product

Advertising Budget

Advertising is an extremely important part of the scent industry and will greatly influence the image of your product. Advertising budgets are set per product per area. This allows your firm flexibility to determine marketing strategies for each product type in each area. The size of advertising budgets is a hot topic of discussion in real life firms. Advertising does contribute to sales. Measuring how effective advertising dollars are in generating sales is a very difficult process.

If Coke increases their ad budget by 10% will sales go up by 10%? Probably not, but sales will receive some positive impact. If Pepsi increases their budget by 10% but Coke does not, what will happen? If both firms increase budgets by 10% what will happen? Do you advertise to generate brand new customers or to "steal" an existing customer from another firm?

A solid advertising budget per product per area might start out at $10,000 to $25,000 per product per area depending on market share aspirations. If a competitor races ahead with a major advertising budget should you follow? Not if your objectives are more profit directed and less market share directed. BUT, if your competitor(s)

becomes large enough that their ad budget starts to bring in your customers instead of new customers, you must react. If you wait too long to react and your firm is fairly small, you might not have the financial power to launch a large-scale defensive ad campaign. The best you can hope for is a modest ad campaign to create a "holding" action (that is hold on to your remaining market share). In some market groups, ad wars might break out. Just like Coke and Pepsi, competing firms must defend themselves by continually increasing ad budgets without generating much if any in new sales.

Size of Sales Force

The size of the sales force for a firm should reflect the firm's marketing strategy. A firm that has a vision of being a niche market firm, selling few units at a very high price, would need a moderately small sales force (3 to 6 per area). The firm only needs a small market share, which could be accomplished with a relatively low number of sales reps given that advertising and quality control budgets are higher. A firm with high ambitions of capturing huge market shares would need a large sales force to make their vision possible. Regardless of marketing strategies, a firm will never need to hire more than 20 sales reps per area. Hiring more than 20 sales reps per area will not increase sales volume, but it will definitely increase expenses.

A large sales force can be a competitive edge for a firm, but it is also expensive. There is a one-time hiring fee of $12,000 per experienced sales rep hired. A firm that wants to hire 20 sales reps in each area will incur a whopping hiring expense of $480,000! It may be more prudent for a firm to absorb this large expense in smaller increments by hiring a portion of the total number of desired sales reps over several quarters, or to hire trainees and assign them to an area the following quarter.

Size of Sales Force in Training

Trainees are sales reps in training. The quarter in which your firm hires trainees they will be trained. The following quarter, the trainees will be ready to be placed as sales reps and will join your existing sales force. There is a $3,000 training fee per trainee hired and a $3,000 fee to place a trainee as a sales rep. Combined, this $6,000 charge is half the cost of hiring an experienced sales rep. For the trial run, we recommend you hire the full number of sales reps to match your anticipated marketing strategy. However, in the real first run we recommend some combination of sales reps and trainees in order to "ease" the strategy into place. This saves money and also allows your firm to adjust sales rep strategies if the real first run produces some unexpected competitive results.

Compensation For Sales Force

There are two methods for compensating your sales force.

- Salary
- Commissions

Every team should compensate their sales force with both a salary and a commission. There are four basic compensation strategies.

- High salary/low commission
- High commission/low salary

- Moderate salary/moderate commission
- High salary/high commission

The compensation strategy your firm decides on should match your marketing strategy. For example, a niche market firm could expect to sell few units of product, but have a high margin on each unit. Such a firm would most likely choose the high salary/high commission strategy. A niche market firm needs a high salary because sales reps won't make much on commissions since they are selling so few units. The units they do sell should be rewarded with a high commission, which will serve as a motivator.

A firm on the opposite side of the spectrum, with a vision of selling cheap product in large quantity, would do better with a low salary, high commission strategy. A low salary would maintain the sales rep, but the high commission would encourage and motivate the sales rep to sell as much product as possible.

Salaries for sales reps typically range from $1,000 to $4,000. Once a firm has had a couple of quarters to become financially stable and prosperous, it might be a good strategy to reward those that helped achieve success for the firm with raises. Toward the end of the simulation, after several raises, salaries might range from $1,500 to $8,000. Of course, salaries must always be coupled with commissions. Typical commission rates for sales reps range between $.50 and $3.00. Over the course of the simulation, as with salaries, it is a good strategy to make slight increases to commission rates as the firm becomes successful and financially solid. Toward the end of the simulation, commissions typically range between $.75 and $6.00.

As with advertising, commissions and salaries have a relative value. If you start paying $1,000 salary and $.50 commission and are satisfied with results, do not change, unless, of course, competitors change. Then you must respond or you will lose market share. You do not need to respond directly with increased compensation, you might instead find an opportunity to maintain market share or perhaps even increase it by spending the extra compensation dollars on quality or advertising.

Credit Policy For Buyers

Within the simulation, your sales reps are selling to simulated retail store buyers. Product is delivered to the warehouse of the retail store with an invoice (bill). Upon receiving the product and the invoice from your firm, some buyers will pay your firm immediately. Other firms will pay your firm in the following quarter. Some stores that want your product will have very good credit, while others do not. Those retail stores that do not have good credit may never pay their bill and your firm will incur a bad debt.

Your firm needs to decide on some type of credit policy, which will define the credit standards buyers must have in order to buy your product. The credit policy standards are defined as follows:

- 0 = Your firm does not have a credit policy. You will allow anyone and everyone to buy from your firm, regardless of their credit history.
- 1 = Your firm will take almost all orders, regardless of credit history, unless the retailer is near bankruptcy.

- 2 = Your firm will not allow those retailers with bad credit history to buy from your firm.
- 3 = Your firm will not allow retailers with bad credit history to buy from your firm. Buyers must supply a positive credit reference.
- 4 = Only retailers with excellent credit history will be accepted. Buyers must have a positive credit reference. Buyers are restricted from buying large quantities from your firm until they have ordered from your firm for two quarters, and paid their invoice in full each time.
- 5 = Retail buyers must have excellent credit, a bank reference, and have been in business for at least two years.

Firms that choose a restrictive credit policy will have few bad debts but it may also reduce the total number of sales. A firm with a credit policy of zero will have more buyers but they will also have a higher bad debt expense. Credit policy can be changed in any quarter. Experiment to find the credit policy appropriate for your firm. To measure your losses do not compare quarter-to-quarter bad debt losses. Compare bad debt losses divided by sales. This will give you a better comparison as quarterly sales change due to seasonal patterns.

Quality Control Budgets

Quality Control is one of the most important parts of your firm's marketing strategy. The scent industry is extremely quality sensitive so quality is not a decision to neglect. As a distributor, your quality control budget will work in two ways:

- To ensure you receive consistent, good quality product from your supplier
- To ensure consistent, good quality product is shipped to your clients
- To ensure that consumers get the quality product they expect

Your firm will contract with a manufacturing firm to produce your product. Your firm cannot be on-site at the manufacturer's production facility to ensure quality. Therefore, your firm needs a good quality control budget to ensure that the product received from your manufacturer is undamaged, the labels are on straight, the boxes are in good condition, and the liquid content matches your quality standards. If for any reason the quality assurance department finds a problem with product received from a manufacturer, that product is immediately returned to your supplier and replaced with new product.

Once your firm has received product from your manufacturer and verified that the quality is to your firm's standards, you must ensure the continued quality of the product while it is in your care. This means that while inventory is stored at your firm's rented warehouses in NAFTA and/or the EU, the product must be monitored and inspected again prior to shipping to your client. If you ship damaged or defective product, your customer will immediately ship it back to your firm to be replaced. If clients continually receive damaged or poor quality product, they will not continue to buy from your firm in future quarters.

In determining the quality control budget, your firm will need to closely examine the marketing strategy. If your firm has a vision of becoming a niche market firm selling high quality, high priced product, then you need a very high quality control budget. If consumers were paying top dollar for your product, they would expect to receive a top

quality product. Of course at the other end of the spectrum, the consumer that is buying the cheapest product on the market can expect to have a lower quality product.

Quality control decisions are entered as a total dollar budget. When entering decisions, you will be asked to assign a percentage of that total quality budget to Product 2. To ensure consistent quality, your firm should base the total quality control budget on a *per unit* amount. This would ensure that as your firm buys fewer or more units, depending on the quarter, quality for each unit stays the same even as the total budget goes up or down. Repeat consumers like to know what quality to expect from your product. They do not appreciate a high quality product in one quarter if in the following quarter they received a very poor quality product. Consistency is good. Therefore, your firm should set a per unit quality control budget in the following ranges:

- Product 1 should range between $.75 cents to $4 per unit
- Product 2 should range between $1.00 to $6 per unit

Once you have selected the per unit amount your firm is comfortable with, you simply adjust the total dollar budget depending on the number of units your firm is buying. The quality control (QC) budget does *not* consider area (Area 1 or Area 2) only the product type (P1 or P2).

Calculate Total Quality Budget

Per unit quality control budget for Product 1 x total number of Product 1 units in inventory and ordered through contracts
+
Per unit quality control budget for Product 1 x total number of Product 1 units in inventory and ordered through contracts

This would give you the total dollar budget, which you need to enter into the quality control decision menu. Then, you need to figure out the percentage of that total dollar budget to be spent on Product 2. The formula is as follows:

Dollar amount of Product 2 budget / Total quality control dollar budget

Example:
Firm A is going to spend .75 cents on quality control for each unit of Product 1 and $1.30 per unit of Product 2. Firm A will have 5,000 units of Product 1 in Area 1 and 5,000 units of Product 1 in Area 2. Firm A will also have 10,000 units of Product 2 in Area 1 and 5,000 units in Area 2.

5,000A1P1 + 5,000 A2P1 = 10,000 Product 1
10,000A1P + 5,000 A2P2 = 15,000 Product 2

10,000 x .75 = $7,500
15,000 x 1.30 = $19,500
= total quality control budget of $27,000

19,500 (total P2 budget) / 27,000 (total QC budget) = **.7222 or 72%**
72% would be the percentage of the QC budget to be spent on P2

Price

The fourth and final P to complete your marketing strategy is price. Price is one of the most critical decisions your firm will make. Just as consistent quality is important to consumers, a consistent price is important to consumers. The price you set for your product will attract a certain type of buyer. If you radically change the price from quarter to quarter your firm will always be struggling to find new consumers to replace those that you lost with the price change. Also, consumers have a memory. They will know what they paid for your product in previous quarters. If your firm decides to dramatically increase the price of your product, yet quality and advertising stay the same, you will most likely lose many customers. Therefore, it is a good idea to consider your pricing options carefully.

As you learned in your marketing chapters, there are three basic methods for pricing.

- Cost
- Competition
- Demand

At this point, your firm has not created a differentiation advantage nor do you know competitor prices so it will be difficult to base your price on competition. In the trial run you only have a rough approximation of demand for your product(s).

The cost method is your only good option for determining a reasonable price as you enter the trial decisions. As you start your real decisions you will have some idea of demand and competitor's prices based on their trial runs. It will still take a couple of quarters of analysis before you can fully include competitive and demand methods into your pricing strategies. For now your firm should focus on covering fixed and variable expenses plus earning a profit.

First, add up your variable costs:

- Cost of the product per unit (manufacturer's price to you)
- Commissions to sales reps

Example:
Firm A will purchase Product 1 from Peacock at a price of $80 per unit. Firm A will pay a commission of $1.70 for each unit a sales reps sells. Therefore, Firm A's total variable costs are $81.70 per unit.
$80 (cost per unit) + **$1.70** (commission per unit sold) = **$81.70** (variable cost for P1)

Next, determine the fixed costs you can anticipate based on decisions made by the firm:

- Administrative expense
- Advertising Budget

- Quality Control Budget
- Sales Expense
- Interest Expense

Example:
Firm A had the following fixed expenses:

- $50,000 admin. Exp.
- $80,000 Advertising Exp. ($20,000 per product/area)
- $45,000 QC Exp.
- $20,000 Sales Exp. ($2,000 salary for 5 reps in each area)
- $228,150 Interest Exp. (interest expense from special loan)

For a total of $423,150 in predictable fixed and semi-fixed expenses.

Next, Firm A thinks they can sell 10,000 units of Product 1 and 15,000 units of Product 2. By dividing the total predictable fixed expenses by the total number of units *Firm A* thinks they can sell, Firm A knows that they must have a markup of at least $16.93 to cover fixed expenses.

$423,150 (total estimated fixed and semi-fixed expenses) **/ 25,000** (units anticipated to be sold) = **$16.93** (Anticipated Fixed and Semi-fixed Expense Per Unit)

From the examples provided, *Firm A* now has a pretty good idea of their predictable fixed expenses and the variable expenses for Product 1. With this information *Firm A* can begin making decisions about Product 1 pricing.

By simply adding the variable cost for Product 1 and the expected per unit fixed and semi-fixed cost per unit to be sold, *Firm A* knows that they should price their product above $98.62. The next question is how far above? After several quarters of experience cost, competitive and demand pricing models in combination will help you answer that question. Going into the trial run without experience we recommend a 20% before tax profit margin be built in. (20% X $98.63 = $19.72)
$81.70 (P1 variable cost) **+ $16.93** (Estimated Expense Per Unit) **+ $19.72** (margin)

= $118.35 (Price for P1)

This example of a trial run pricing process produced a general cost based price. Your team needs to consider your firm's vision and its marketing strategy. If you are going to attempt to capture P2 market share at the upper end then you will need to increase semi-fixed promotional expenses for P2 beyond that shown in this example. Your price for P2 will need to be moved up to reflect the increased costs. What is interesting is that you might be able to raise the 20% pre-tax profit margin higher on P2 in the upper end market. Perhaps it will accept a 40% or 60% margin if you are the only firm in that market. You will need to test demand and monitor competition to determine if such a strategy might work.

Financing the Firm

At this point, you have not yet studied finance, but you will need to make financial decisions in this first trial decision. Therefore, we have created a table with possible financing plans. Pick the financing plan that best matches your firm's vision regarding size and risk tolerance. You will have another opportunity to finance your firm in the second trial run and by that time, you will have more accounting and financial information. The second trial decision is heavily focused on forming a good financial plan that will meld with your firm's marketing strategy.

In the chart below risk levels are identified by the "!" sign and returns levels are identified by the "$" sign. The more signs shown the greater the risks or returns.

Market Share Ambitions Matched With Stock Only Financing					
Desired Market Share	10%	20%	30%	40%	50%
Risk Tolerance	!!	!	!!	!!!!	!!!!!!
Return Potential	$$$	$	$$$	$$$$	$$$$$$
Number of Shares to Issue	400,000	600,000	1,000,000	1,400,000	2,000,000

Market Share Ambitions Matched with Stock & Debt Financing					
Desired Market Share	10%	20%	30%	40%	50%
Risk	!!!!	!!!	!!!!	!!!!!!	!!!!!!!!
Return Potential	$$$$$	$$$	$$$$$	$$$$$$$$	$$$$$$$$$ $$$
Number of Shares to Issue	300,000	400,000	500,000	700,000	1,000,000
Dollar value of Bonds	$1,000,000	$1,200,000	$1,500,000	$2,000,000	$2,500,000

Example in reading the table above:

If your firm were willing to take on significant risk in order to pursue huge returns by dominating and controlling 50% of your markets, your firm might make the following financial decisions:

- Issue 1,000,000 shares of stock (raising about $2,750,000)
- Issue $2,500,000 in Bonds (In $ not the number of bonds sold)

You should now be ready to enter your first trial decision. If you have doubts about the decision entry process, refer to Appendix G, which describes how to enter all the decision and contract variables.

Practice Decision Forms

Marketing Decision Form

Advertising:

	Area 1	Area 2
Product 1	_____	_____
Product 2	_____	_____

Prices:

	Area 1	Area 2
Product 1	_____	_____
Product 2	_____	_____

Sales Reps:

Area 1	Area 2
_____	_____

Trainees: _____

Change in Sales Rep Salaries:

Area 1	Area 2
_____	_____

Change in Sales Rep Commissions:

	Area 1	Area 2
Product 1	_____	_____
Product 2	_____	_____

Credit Policy:

0 1 2 3 4 5

Budget Decision Form

Quality Control

Quality Control Budget_____
Percentage of Budget to be spent on Product 2 _____%

Financial Decision Form

Issue or Repurchase Bonds

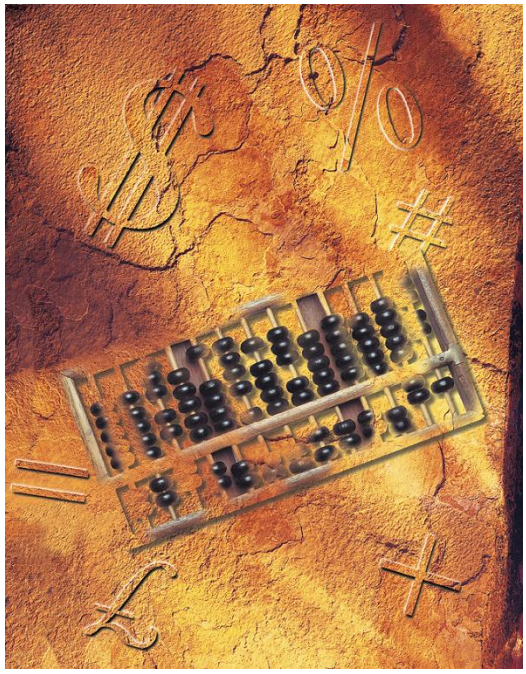
Issue Bonds _____

Issue or Repurchase Common Stock

Number of Shares to be Issued _____

Chapter 6

Accounting



This Chapter is designed to introduce you to accounting practices. After reading this chapter you should have a good idea of basic accounting concepts, which you can then apply in the analysis of your first set of simulation results.

ACCOUNTING

Some students love working with numbers and data. If you are one of those students you might consider a career in accounting, management information systems or finance.

Some students dislike working with numbers or specific data details. It is very important, however, that you understand and can interpret financial information. Every entrepreneur and every administrator in business uses accounting and financial data in their decision-making. You do not have to like it, but you do have to understand it.

Balance Sheet

Assets			**Liabilities**	
Cash		748919	Accounts Payable	17500
Accounts Receivable		441188	Special Loan	0
Marketable Securities		0	Short Term Loan	0
Inventories:			Term Loan	0
Finished Goods	1229950		Bonds	1200000
Raw Materials	0		Total Liabilities	1217500
Total Inventories		1229950		
Manufacturing Plants			**Equity**	
Plant and Equip.	0		Common Stock	400000
-Accum. Depr.	0		Other Paid In	1004000
Net Plant		0	Unamort. Disc	-28453
			Retained Earnings	-172990
			Total Equity	1202557
Total Assets		2420057	Liabilities + Equity	2420057

- **ASSETS:** Items of value owned by the firm.
- **LIABILITIES:** Portion of the assets funded by debt and owed to creditors.
- **EQUITY:** Portion of the assets funded by owners of the firm (stockholders).

This report lists the assets of the firm and the dollar claim that various groups have on those assets. It helps keep everyone involved in the business honest. Since it would be relatively easy to change numbers and walk off with valuable assets, investors usually demand that an outside accounting firm check how data is collected and used. They want

to be sure the balance sheet balances and that the numbers are accurate. Creditors and owners insist that accepted accounting standards and procedures be used to insure that the firm's financial statements meet a uniform standard. Such standards allow for comparison over time and also allow for comparison between firms. Let us examine the details of a balance sheet.

Assets:

The left side of a balance sheet lists the firm's real **assets**. Common practice lists the assets in order of their liquidity. The more liquid the asset, the closer it is listed to the top of the balance sheet. Liquid means how quickly and how safely (without a loss) an asset can be turned into cash. Cash is the ultimate liquid asset. Therefore, the assets listing on the balance sheet starts with cash (checking and money market accounts). As you spend the cash to buy assets, the accountant will decrease the cash account and increase other asset accounts such as inventories.

The right hand side of your balance sheet lists where the funds came from to purchase the real assets on the left side of balance sheet. The list of funding sources is in order of shortest time until it must be paid back to the longest time. If creditors and stockholders put money into the firm, the real assets had better equal what they put in. If the amount of funding listed on the right side does not balance or equal the real assets listed on the left side, there is a serious problem. Either the accountant made an error or there was a theft of real assets.

Employee theft is a major source of loss to many firms. Sometimes employees take tools or finished goods. Employees that handle money are often tempted to pocket some cash. Businesses must find a way to monitor assets and employees without making employees bitter about the lack of trust. If you see clerks taking their change drawers out of the cash register at the end of their shift, that is a method the business uses to keep cash shortages isolated to just one employee. That makes each clerk responsible and accountable for the cash they handle - a good management practice. What if the drawer is short of cash? What would you do the first time it happens to an employee? What about the second time?

Liabilities:

The accounts on the right hand side of the balance sheet are grouped into two main sections. The sections are very important to the reader of a balance sheet. The top section shows all debt sources by categories. This section as a whole is called the **liability** section. When discussing this section people use various terms which all have about the same meaning.

- Liabilities
- Borrowed or owed sources of funding
- Indebtedness
- Creditor claims
- Debt financing

The important concept is that some person or group (creditors) have lent the firm assets (usually cash) and the firm is obligated (usually evidenced by a written contract) to return the cash by a specific date.

Since liabilities have legal obligations for repayment in a timely manner, management, stockholders and creditors do not want to see the liabilities section on the balance sheet to be excessively large. If liabilities become too large, it would cast serious doubt on the firm's ability to repay obligations on time. Failure to pay on time will result in a bad credit rating, higher interest costs and eventually if not corrected, will lead to bankruptcy. There are two measures that help determine if the firm is nearing its debt load capacity.

A. A measure often used to determine the ability of the firm to pay debts in the short term is called the **current ratio**. The current ratio totals all balance sheet assets that are likely to convert to cash within one year and divides it by all debt due in one year. The answer had better come out to be at least 1/1. A ratio of 1-to-1 means all short term debts are just covered. A ratio of 1-to-1 is nerve-wracking for bankers. They feel better about lending money if the number is 2-to-1. Accountants often divide the balance sheet assets and liabilities into subsections to allow for easy visual calculation of the current ratio. If you see such a balance sheet it will have assets that will turn into cash within the year in a subsection called, "current assets" and liabilities due within the year in a subsection called "current liabilities". Just a quick glance will let the reader determine the approximate current ratio.
B. A measure to determine if a firm can repay its total debts in the long run is called the **debt-to-equity ratio**. This ratio measures the liability (creditor) section against the equity (owner's) section. Again, a ratio of 1-to-1 makes creditors nervous unless the firm is making consistently good profits. Conservative firms would have a ratio of debt to equity of .5/1.0, which means 1/3 of the money came from debt and 2/3 came from owners (stockholders) putting money into the firm. For example, if stockholders put in one dollar and creditors put in fifty cents, total money invested equal $1.50.

Equity:

Equity is the portion of the assets funded by the owners of the firm (stockholders). Equity (stockholder's claim on assets) comes from two sources:

1. The sale of stock generates cash shown on a balance sheet with a corresponding increase in equity denoting the source of the cash. Due to US tax laws, the sale of stock is recorded into two accounts in the equity section instead of one. In most States, stock must have a stated value before shares of stock are sold. This value is called **par value** or stated value. Many states place a tax on the par value so firms understate the real value of the stock to avoid taxes on par value. For example, in the Global View simulation the par value is set at one dollar per share of stock issued. The stock will be sold to the public in the initial public offering for more than $1.00 per share. The excess of the IPO sale price minus par value must be recorded in a separate account often named a "surplus" or "other-paid-in"

account. The total of the common stock account and other-paid-in accounts equals the proceeds (cash) received from the IPO.

2. To make the balance sheet balance, if the firm increases its assets (shown on the left side of the balance sheet) through profits, equity (shown on the right side of the balance sheet) is also increased in a stockholder account called **retained earnings**. Retained earnings is listed in the equity portion of the balance sheet and keeps a running total of profits and losses the firm receives over its quarters of operation. Equity is decreased if a firm decreases its assets through losses, theft or disaster (such as uninsured fire damage).

In the balance sheet used as a sample at the beginning of this chapter, the IPO was 400,000 shares sold at $3.51 per share. The cash asset increased by $1,404,000. To balance the cash entry the stock sale was recorded as $400,000 common stock ($1 par value) and $1,004,000 paid-in-capital. From the investor's perspective, they paid $3.51 per share for the stock and they will judge the team's performance by increases earned in the share price beyond the IPO price.

The firm has lost assets (probably cash) in the amount of $172,990. Creditors do not accept any losses nor do they participate in profits, but the reduction to the left side of the balance sheet (assets) must be balanced with a reduction to the right side of the balance sheet. The full loss is charged to the stockholders as seen in the negative retained earnings account. This means that management, to date, has lost $172,990 of the stockholders $1,404,000 investment.

Special Stockholder Accounts:

The "Unamortized Discount" account shows you took a loss on the sale of your bonds. When you sell bonds you are selling a contract to repay cash. It may take investment bankers months to prepare a bond issue and its underlying contract. Even if they delay putting the rate of interest in the contract until the last few days before they sell the bonds, interest rates may change in the general market or the firm's credit rating may change. Thus, when you have a $1,000 bond to sell at a set rate of interest, by the time it is actually sold, you will probably be forced to lower the price in order to entice buyers to part with their cash. Lowering the price of the bond is known as a discount.

For Example: Your $1,000 bond sells for $950. The contract requires you to repay $1,000. Here is the problem. You must record the bond liability at $1,000. You must credit the cash account for the actual cash received, which is $950. The balance sheet is $50 from balancing. Claims of $1,000 show corresponding assets of $950. If life were simple we would report a loss and lower retained earnings in the equity section by another $50. However, tax laws require the $50 loss to be spread out over the life of the bond. Spreading the loss is called **amortization**. As with the sale of stock, tax laws now complicate the recording of the loss on the sale of the bond and require adding another account on the balance sheet.

The balance sheet above shows $1,200,000 worth of bonds sold. The prices were discounted in order to sell all the bonds. The loss, which for tax reasons is waiting to be

recorded, is $28,453. This process is a fairly sophisticated accounting issue. We have elected to handle all the entries and the quarterly charge-off of a portion of the loss automatically. You can watch the account as it decreases by 5% each quarter and is charged off against your income, (as part of the interest expense) but you have no entries or responsibilities for the account. The unamortized discount is shown in this simulation to acquaint you with the need to meet tax regulations and demonstrate how it can complicate the firm's accounting process.

Total Equity in this simulation is the sum of the four stockholder accounts (common stock, other paid in, unamort. disc., retained earnings) and is shown on the right hand side of the balance sheet.

We do need to consider why the government makes life so difficult. The government wants its tax revenue. If you claim a big loss because of a bond discount or purchase of a factory all in one year, you might not pay any taxes. In order to keep tax revenues somewhat stable and fair to everyone, the government set up rules that attempt to match expenses with the life of the project. That way a firm cannot simply avoid taxes in the early years of large-scale projects.

The same concept of matching revenues with the costs (expenses) to earn those revenues is the basis of accounting theory. If you build a factory it makes sense to the management and the investors that you just incurred an expense. However, accountants and the government view the factory as an asset and not an expense. One asset (cash) was traded for another (the factory). The factory is only an expense as it wears out All businesses must document and keep the original purchase price of the factory on file plus all records of all improvements. Then each year, according to a complex formula, a small part of the factory investment can be charged off as an expense on the income statement. This is called **depreciation**.

Important Accounting Concept

Individuals in their daily life think in terms of cash to measure how well they are doing. Most people deposit their paychecks and monitor their checkbook balance. A firm however, does not measure how well it is doing by monitoring its cash balance. A firm monitors accounting statements that use the concept of matching revenues with expenses related to producing that revenue.

- Revenue:
  a. Cash sales
  b. **Accounts receivable** (credit sales to be collected as cash in the future)
- Matching Expenses:
  a. Cash expenses
  b. **Accounts payable** (expenses that helped produce revenues but remain unpaid go to this account)
  c. Cash expenditures already made and charged off as an expense over time to match revenue (deprecation and bond discount)

In the sample balance sheet shown at the beginning of this chapter, the firm sold $441,188 dollars worth of finished goods but they have not yet received payment for those finished goods. The sale will be recorded as income and the **accounts receivable** account will increase by the $441,188. Note that revenue (sales) and cash is not the same thing. This means that a firm might show substantial profits because it had substantial sales and modest expenses. However, even with a large profit it might be short of cash if a lot of sales "are stuck" in accounts receivable.

Case Question 1:

What would happen to the above balance sheet, given the following? Your employee, Ruth, was moving cases of finished goods from the warehouse to the loading ramp. Another employee, Sam, came around the corner of the loading ramp. Ruth turned sharply to avoid hitting Sam and dumped the entire load of finished goods off the ramp onto the road. The finished goods, at a cost of $3,500 were completely ruined.

Answer: The accountant would **write down** or reduce the value of the finished goods as:

$1,229,950 - $3,500 = $1,226,450

Next, the loss of $3,500 would be shown as an expense on the income statement. If that were the only event and taxes were not considered, the income would show a loss of $3,500. The new balance sheet would show assets decreased by $3,500 since the last balance sheet. The decrease in assets would be offset by a reduction of $3,500 in the equity section of the balance sheet, specifically the retained earnings account.

The firm would have many transactions during the accounting period and might even make a profit despite the loss. Taxes also must be accounted for. The summary statement showing the result of the entire period's transactions is shown on the income statement.

Income Statement

How is a business able to track all activities and merge them together such that the balance sheet at the end of one period can be updated to create the balance sheet at the end of the next period? (In the simulation, a period is a quarter of a year.) Accountants set up the procedures for handling the information and are responsible for maintaining records on every piece of inventory and every dollar moving through the firm. The tracking of and reporting on the movement of vast amounts of products and dollars in this day seems to be a reasonable thing to do. We have computers, bar codes to identify a piece of inventory and electronic cash management tools. Operating the system before computers must have been a time consuming and expensive task in "the old days". Computers make a breeze of complicated accounting systems as explained next.

Adjustments to any one balance sheet account, given a change has occurred, requires that a second account must also be adjusted in order to maintain the balance on the balance sheet. This system is called double entry accounting. Accounts are generally maintained in separate files and only at a certain point in time are they merged to determine the overall

position of the firm. The new balance sheet will show the new and current value of assets, liabilities and equity. If you want to determine how well the firm has done over the period, simply look at the increase or decrease in the retained earnings account from last period to this period. All one needs to analyze performance of the firm are balance sheets.

Management and investors as well as the government taxing agencies need better tools to analyze performance. The financial statement that provides details on management's "operating" performance is the income statement. If assets went up due to operations (a profit), then retained earnings went up on the balance sheet. If assets went down due to operations (loss), then retained earnings went down on the balance sheet.

In the simulation you can immediately judge management's performance of operating the firm by looking at the income statement. The adjustment made to retained earnings from the old to the new balance sheet is the after-tax income number reported on the income statement as **net income**. How that number was determined is shown in detail by gathering the data from the separate accounts.

Income Statement - Firm XX

Revenue		**Expenses**	
Sales Revenue	1105121	Cost of Goods Sold	665050
Less: Processing Costs	165	Advertising	60000
Net Sales	1104956	Quality Control	49000
Investment Income 0:000	0	Bad Debts	3139
Marketable Securities	0	Product Improvement	0
		Engineering Studies	0
		Sales Expense	34278
		Administrative Expense	50000
		Invt/Shipping Charges	9531
		Maintenance	0
		Depreciation	0
		Interest Expense	202948
		Factor Cost	0
		Miscellaneous Expense	204000
Income Before Taxes	$ -172990	Income Taxes	0
Net Income	$ -172990		

*Disregard the following accounts as they are used for the advanced manufacturing teams only:

- Product Improvement
- Engineering Studies
- Maintenance
- Depreciation

*The following accounts are budget items (expenses) determined by your team:

- Advertising
- Quality Control
- Bad Debts (you set credit standards for your customers)
- Sales Expense (you set salary and commission)

*The following accounts are charged as expenses automatically:

- Cost of Goods Sold (not the goods you bought, only those you bought and sold)(remember we are matching revenues and expenses, you can only charge off the goods sold in that period as an expense for that period)
- Inventory and shipping charges
- Interest Expense (depends on your use of loans and/or bonds)
- Factor Cost (like interest but you sell your accounts receivable to the bank)

*The following account is charged as an expense by the administrator:

- Miscellaneous (hiring sales reps, recruiting or placing a trainee, etc.

The income statement specifies over a certain period of time how much profit the firm made or how much it lost. In this simulation, the time period used is one quarter.

The general purpose of the income statement is to report all the revenues, both cash sales and credit sales, for the quarter. The expenses for the same quarter are then deducted and you have the firm's profit (or loss). If there is a profit, taxes are paid on part of that amount, resulting in a profit the business can keep. That portion of the profit that the business can keep is called **net profit after tax**.

If the owners (or stockholders) don't take the profits (through dividends) the profits remain invested in the assets. The assets of the business increased or decreased as measured by the profit or loss on the income statement and can be seen as a corresponding increase or decrease in retained earnings on the balance sheet.

In the sample income statement note that the reported loss was $172,990. The balance sheet for the period shows the same loss in assets. Balance sheet assets decreased by $172,990 and in order to balance, stockholder equity was reduced by the loss as shown by -$172,990 in retained earnings. If the new income statement reveals another loss of say $100,000, the balance sheet will show a corresponding loss in retained earnings of $272,990. Income statements show only that one period's activity. Balance sheets show the

cumulative effects of operating the business and are a financial blueprint of the firm as of the date it is prepared.

Key Words:

- Accounts Payable
- Accounts Receivable
- Amortization
- Assets
- Current Ratio
- Debt-to-Equity Ratio
- Depreciation
- Equity
- Liabilities
- Net Income
- Net Profit After Tax
- Par Value
- Retained Earnings
- Write Down

Appendix B:

Report Analysis

The quarterly news, *Dollars and Scents Quarterly*, will provide your team with information on the political and economic environment related specifically to your industry. The new edition of the "The Boss" is available after each run at the AGV website.

There are two categories of reports within the simulation: the Market Group Report and the Firm Report. The Market Group Report contains public information about all firms in a market group. Subcategories of the Market Group Reports are:

- The Economic Report
- The Sales and Marketing Report
- The Financial Report

The Firm Reports are confidential and contain specific information about how the firm performed during the quarter. Each team will have access to only their firm's Firm Reports. Subcategories of the Firm Report are:

- The Credit Report
- The Sales and Marketing Report
- The Production Report
- The Income Statement
- The Balance Sheet
- The Cash Flow

The Contract Report

Market Group Reports

Association Global View

Economic Report

Game-Wide Economic Data						
Economic Index	Current	109.0	Next Quarter	110.2	Next Year	108.0

Consumer Confidence Index	100.0	**Exchange Rate**			
Bill Rate	0.020	**EURO**	**0.960**		
Prime Rate	0.0250	Yen	0.00		
Market Index	Advanced	0.00	Introduction	0.00	

Economic Report

Economic Index:

This is a relative measure of economic activity. The number 109 does not tell us anything of value. If we consider the current index of 109 in relation to the economic forecast for next quarter (110.2) and for next year (108) we can determine the direction of economic change and its magnitude. The higher the index number the greater the dollar value of total products being produced and services provided. Given the numbers on the sample Economic Report, economists in this simulation expect a 1.2% increase next quarter, but a 2% decrease in economic activity by the end of the year (4 quarters from this report). In turn, your firm should expect sales to increase slightly next quarter after adjusting for any seasonal changes. However, when ordering product to be produced for your firm a year from now, you should order less.

How much less should you order? This is a very difficult question. If consumers purchase your product at the exact rate they make money, then your product demand will exactly match changes in the economic rate of growth. Some products such as beer tend to fall slower than the economy falls. Automobile demand tends to fall faster but not rise as fast, until consumer confidence also is high (next report). Then autos boom faster than the economy. Our recommendation is to assume your product demand rises and falls at the same rate as the economic index. In statistical terms, your product is perfectly correlated with the economic index. This is a safe assumption until experience allows you make a different assumption. Real firms spend considerable effort to determine their product's statistical relationship in order to better forecast demand.

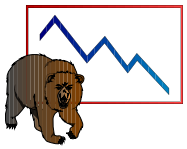
Workers produce the products and provide the service resulting in workers getting paid, which in turn results in demand for more products and services. If growth is too fast prices go up though the actual value of the product or service remains the same. This upward movement of prices for the same product or service is called **inflation**. Many citizens are financially injured by inflation but some do benefit. Usually it is the more wealthy people who benefit and those with limited or retirement incomes suffer. A **recession** occurs when the economy declines for more than two quarters in a row. Businesses do not make new investments in a recession and consumers sharply reduce spending. In this situation, individuals cannot find work resulting in less demand for products in general. A slowdown in consumer spending will cause businesses to make even fewer investments resulting in job layoffs. This means consumers will have even less money to spend. This cycle can cause increasing rates of job layoffs and lower demand. It is very important that the government monitor economic activity and adjust its economic policies to grow the economy at a reasonable rate.

Consumer Confidence Index:

This is a relative measure of the dollar value of a group of stocks. In the real financial markets, measures, called **indexes**, have been established. For reporting purposes a set of selected stocks are measured each day (value averaged). The daily measurement is compared to yesterday's measurement and measurements going back for

decades. Two very famous sets of stock measurements are the **Dow Jones Thirty Industrials** and the **NASDAQ**. These two sets of stocks include the value of each stock in that set. A group or set of stocks, when consistently measured over time, creates an index value, which provides a general indication of how all stocks are performing. You can follow both of these famous United States indexes over the Internet.

In the simulation, the index value of 100 must be measured over time in order to determine if value is going up or down. If it is moving up, it indicates that investors in general have faith that the economic environment is favorable to business success. If the index is moving down investors and perhaps consumers think business will not perform very well in the next year or so. If the index in the simulation indicates a downward cycle in stocks, carefully analyze your firm's strategy and consider what would happen if your retail store clients cut back on the purchase of your product. Sometimes businesses will cut back ordering inventory even though consumer demand is stable. Thus you need to watch both the economic index and the Bear-Bull Index (and the consumer confidence index which is matched with the Bear-Bull Index in the simulation.



If the Bear-Bull index has a downward trend, it means that investors are less willing to purchase stocks. The index provides information only about stock investors. However, in the year 2000, Mr. Greenspan, who is Chairman of the Federal Reserve Bank in the United States, indicated that increased stock values were also enabling consumers to purchase goods and services. This is an entirely new consideration for economists. In the simulation, we have set how consumers feel about their spending plans (consumer confidence) equal investor confidence as measured by the Bear-Bull index. Thus the Bear-Bull and Consumer Confidence numbers are almost perfectly correlated in the simulation. Are they perfectly or highly correlated in real life? Perhaps in the short run but economists are still analyzing the new relationship.

Bill Rate:

A "bill" is a nickname for a **treasury bill**. A bill is short-term debt issued by governments. To the buyer of the debt, a treasury bill is similar to a savings bond but it matures or is ready to cash out in a matter of months instead of years. Savings bonds can be purchased by investors in very small denominations such as $50. T-bills start at $10,000 each. The term "**rate**" means interest that the bill or bond will pay.

In financial papers such as The Wall Street Journal, investors watch the treasury bill (or t-bill or bill) rate. That rate is what the government must pay to borrow money for a short period of time. If the United States government must pay the rate of 6% annually, most firms will have to pay more. Thus, the t-bill rate is often referred to as an indicator or starting point for all types of interest rates at any point in time.

Prime Rate:

The very best customers of a bank who need to borrow money for a short period of time hope to borrow close to what the United States government must pay. At the start of the simulation the very best or **prime rate** going to the most stable firms is 10%. If the bill rate increases, banks will raise their prime rate accordingly. With rare exception all firms in the simulation will borrow money at some point in time. You will need to watch the news in the simulation to see how the **Federal Reserve System** of the United States and similar government controlled central banks of other countries are affecting interest rates. The government banks do not just announce a new rate, they increases or decrease the supply of money which, given the demand for money, influences the interest rates up or down. The central banks regulate the supply of money and the demand for that limited supply determines the interest rates.

If you see news in *Dollars and Scents Quarterly* that the central banks are tightening up money supplies, that is a clue that if you need to borrow money you should do it immediately before the rate goes up.

Exchange Rate

If you sell product in A2, that is the EU or European Union. The currency is called a EURO. The simulation starts both currencies equal in value. If you price your product in both markets at 100 Dollars in A1 and 100 Euros there is no difference in the Income Statement revenue. In this case the exchange rate equals 1 dollar to 1 Euro. But if a Euro goes down in value to 1.1, when you sell your product for 100 Euros it takes 110 of them to equal 100 dollars. Thus your reported revenues, which are all in dollars, decline.

If you notice the exchange rate of the Euro going down to 1.1 should you increase your price for your product in Europe? If you charged 110 Euros the revenue would be unchanged … except the higher price will lower total sales in Europe!

Association Global View

Financial Report – Market Group Report

Financial Report			
Firm	**Stock Price**	Div/Shr	Net Income
11	$ 4.53	0	236541
12	$ 4.95	0	187291
13	$ 2.79	0	-45413
14	$ 3.46	0	-117535
15	$ 3.73	0	75633
16	$ 2.41	0	-271201
17	$ 2.15	0	-598403

New Financing:		
New Stock issue of	400000 shares at	3.92 sold by firm 1
New Stock issue of	300000 shares at	4.34 sold by firm 2
New Stock issue of	1000000 shares at	2.66 sold by firm 3
New Stock issue of	400000 shares at	3.56 sold by firm 4

New Stock issue of 500000 shares at 3.50 sold by firm 5
New Stock issue of 2000000 shares at 2.34 sold by firm 6
New Stock issue of 1000000 shares at 2.71 sold by firm 7
Bonds issued (or called if negative): 1000000 by firm 2
Bonds issued (or called if negative): 1200000 by firm 4
Bonds issued (or called if negative): 1500000 by firm 5
Bonds issued (or called if negative): 2500000 by firm 7

Financial Report

Stock Price:

This list shows the current value of one share of stock for all firms in a given market group.

Dividends per Share (Div/Shr):

Earnings per share) or "EPS" are the total earnings for the period divided by the number of shares of stock. A portion of the current EPS (or it can come from past earnings retained in the firm) are paid in cash on each share of stock (called **dividends**). None of the sample firms issued dividends because it was their first quarter of operations. It is illegal to issue dividends prior to having earnings. Firms 11, 12 and 15 had positive earnings in their first quarter of operations as shown above. Those firms will have accumulated positive retained earnings and would be allowed to pay dividends in the following quarter. Firms, which issue dividends in their opening quarter or while retained earnings are negative, are subject to fines of up to $50,000. Firms 13, 14, 16 and 17 all have negative retained earnings after their first quarter of business. Before they can pay dividends they must earn enough to make up for the losses and have a positive balance in retained earnings.

New Financing:

The share price for stock in the bottom of the report shows the price at which investment bankers (specialists in selling new stock) were able to issue the shares. The dollar value shown is the money actually going to the firm per share. Total dollars will be the share price times the number of shares issued. The value of the stock as it is sold or exchanged to another investor is the dollar value listed under stock price in the upper part of the report. Note that at the close of the quarter, the value of stock is different than its "initial public offering" or IPO.

Also listed under new financing is the amount of bonds sold by firms in the given market group.

Association Global View

Sales and Marketing Report – Market Group 1

Sales and Marketing Report		
	Area 1	**Area 2**

		Product 1	Product 2		Product 1	Product 2	
Total Sales (in units)		**6266**	**22431**		**5525**	**57282**	
Total Wholesale Orders		**0**	**0**		**0**	**0**	
Total Backorders		**0**	**0**		**0**	**22**	
Total Advertising		**167000**	**167000**		**167000**	**167000**	
Ending Sales Lost		**0**	**0**		**0**	**439**	
Average Commission		**1.721**	**1.821**		**1.721**	**1.821**	
Average Rep Salary		**2242.857**			**2242.857**		
Firm	Firm Name	**Product 1**	**Product 2**	**Sales Reps**	**Product 1**	**Product 2**	**Sales Reps**
	Market Group Average	**$ 136.86**	**$203.57**		**136.83 Euro**	**203.57 Euro**	
11	Firm 1	$150.00	$300.00	2	150 Euro	300 Euro	2
12	Firm 2	$160.00	$300.00	3	160 Euro	300 Euro	3
13	Firm 3	$138.00	$200.00	5	138 Euro	200 Euro	5
14	Firm 4	$135.00	$185.00	6	135 Euro	185 Euro	6
15	Firm 5	$130.00	$165.00	7	130 Euro	165 Euro	7
16	Firm 6	$125.00	$140.00	10	125 Euro	140 Euro	10
17	Firm 7	$120.00	$135.00	10	120 Euro	135 Euro	10
7 Firms pay sales rep commission on product 1							
7 Firms pay sales rep commission on product 2							
7 Firms pay sales rep salary							

Sales and Marketing Report

The Sales and Marketing Report is a subcategory of the Market Group Report. The Sales and Marketing Report contains valuable information about your competitors. Careful analysis of this report will provide your firm with market group totals and averages to compare against your firm's expenditures and budgets.

Total Sales (in units):

Total sales are listed by product and area. Total sales are the total sum of all units delivered by all firms in the given market group for the given quarter. The seven firms listed in this example had combined sales totaling 6,266 units of Product 1 in their region (group), which is located in the NAFTA market (Area 1). Wholesale sales from a Global View firm to another Global View firm

Total Wholesale Orders:

Total wholesale orders (firm to firm sales) are listed by product and area, and is the total sum of all units sold by all firms in a given market group to other firms participating in the simulation. None of the sample firms shown in this chapter had any wholesale sales, so there are only zeros in this category of the report. None of the Introduction to Business

firms participating in the simulation will be manufacturing product, so this category will usually have zeros. However, if a firm makes sales at an electronic tradeshow or if a firm has a surplus of product and sells to another firm in the simulation, the total number of units sold to the other firm(s) would be listed in this category. It is important to keep track of these numbers because wholesale sales are included with the Total Sales (in units) category. Total market group demand figures (important to forecasting demand) would be exaggerated if a firm in your market group were selling product to other firms. If there are any wholesale orders listed, subtract them from the Total Sales (in units) figures when forecasting demand or in calculating your market share. .

Introduction to Business firms are almost always buyers of products from firms, not sellers. It is possible that your firm may error in purchasing excessive amounts of product. Such an error will have triggered a need for large amounts of cash. If your cash balance was low, a very expensive special loan would automatically be supplied. You would be stuck with very high interest charges and inventory storage charges. If such an event happens to your firm, you can sell the excess product to any firm and it will be listed as a wholesale firm. When you negotiate product price with another attempt to cover the cost of your product and the 6% freight charge which you will automatically be charged for as the seller. Sales to another firm must be entered in the CONTRACTS decision area, not in the shipping area for firm decisions.

Total Backorders:

Total backorders, listed by product and area, is the sum of the number of units of backorders for each firm in a given market group. This information is important in determining total market demand in your market group. Total backorders are part of demand for that quarter but are *not* listed with total unit sales. It is important to add total backorders to the total unit sales in order to determine a more accurate market group demand figure.

Total Advertising:

Total Advertising, listed by product and area, is the sum total of all advertising budgets of all firms in a given market group.

Ending Sales Lost:

Ending Sales Lost are listed by product and area. Sales lost are the total number of units demanded which could not be filled due to a lack of product. Some firms may have product in inventory and sales lost are still report for the market group. The buyer was searching for products with a particular set of price/quality/promotion characteristics. If the firm that had such a product runs out of inventory, some backorders are created and some sales are lost. The administrator checked each firm's inventory in the above example and found that five of the firms had plenty of P2 A2 left in inventory, yet there were ending sales lost for P2A2. This means that the buyers could not find the type of units they wanted at the right price, with the right amount of promotional backing, and the right amount of quality. Most likely there will always be some ending sales lost within any given market group. However, as firms refine their forecasting skills and differentiate themselves through price,

promotion, and quality strategies the ending sales lost for a market group will generally decrease.

It is possible that sales lost by one firm may be diverted to another firm. In that case, sales lost would be zero. By analyzing their confidential firm reports, the firm that lost the sales will know they lost sales. The firm that gained the other firm's lost sales (we call them the lucky team) does not know they gained the other firm's lost sales. The lucky team thinks they are just great marketers having earned great market share. Should the team with better products ever get their forecasting right and match inventory to the forecast, they will not have any lost sales. The lucky team will not receive any lost sales orders and their income will plummet along with market share. ***If you ask your instructor or Global View tutor what went wrong, they will not be able to find anything wrong. Given no other changes, all the data would indicate that market shares should have stayed the same. The answer: your competition finally got smarter and your firm took a big hit. You are no longer lucky and instead must aggressively change your competitive strategies in order to maintain market share.***

Average Commission:

Average commission, listed by product and area, is the market group's average commission paid per unit. If confidential firm reports are supplied for each of the seven firms in this example, add each firm's commission rate for Product 1 in Area 1, then divide by seven (the total number of firms) to arrive at the average number shown in the above report.

Average Salary:

Average salary, listed by area, is the market group's average salary paid per sales rep in a given quarter. If the confidential firm reports are available for all seven firms, divide the total salary summed for each Area by seven to determine the average Area salary for this market group.

Prices:

Each firm's prices are listed for each type of product they are selling in each area. Area 1 prices are stated in dollars. Area 2 prices are stated in Euros. To determine how area 2 sales revenues were calculated, it will be necessary to divide the Area 2 price by the current exchange rate (found on the Economic Report).

Example:
Firm 11 had an A2P1 price of 300 Euros; 300 divided by 0.96 (the current exchange rate) = 312.50 the dollar equivalent of the Area 2 Euro price. Your firm's revenues from the EU will have increased $12.50 due to the exchange rate. Note that the lower the EURO number in relation to a dollar, the higher its value. An exchange rate of 0.96 to the dollar means it takes only .96 of a Euro to buy 1.00 of a dollar.

Sales Reps:

The total number of sales reps each firm has is listed by area.

Firm Reports

Use the information presented in your firm reports to design your firm's first set of decisions. Do not assume that the results of your decisions will be exactly the same as they were for your trial decision. Remember, you are entering a competitive environment and no one knows ahead of time what your competitors will be doing. Many firms will revise their strategy or decisions based on the information generated in their two trial decision reports.

The following sample firm reports are full of great information, but you cannot assume that the software model that drives the simulation is static. The model is dynamic. That is, the demand is not preset, but is dependent on the actual decisions made by the participants in the simulation. Therefore, even the simulation administrators cannot precisely determine demand in advance. We recommend that you concentrate your efforts on how the market group is changing, how your competitors are changing and where you should be positioning your firm, rather than playing against "the computer".

The firm reports listed in the following examples are from sample Firm 11.

Association Global View

Credit Report - Firm Report

Credit Report	
Credit Rating	**1.841**
Short Term Rate	**5.708**
Debt to Equity Ratio	**0.01**

Credit Report

Credit Rating:

Within the simulation we use a credit rating scale of 1 to 6 with 1 being the very best and 6 being the very worst evaluation. The rating for your firm will affect the cost of borrowing money. Your credit rating improves very slowly over multiple quarters but can be severely damaged in just one quarter. If you run out of cash, your credit rating will automatically go to a 5.

Review your cash balance as seen in the cash account on the balance sheet. It will never be negative. When you run out of money, your overdraft protection will automatically issue a special loan large enough to cover all expenses *plus* $10,000. If you see the nice round number of $10,000 in cash, check the liabilities section of the balance sheet. You will find a special loan was provided. Next, check your credit rating!

S.T. Rate:

The short-term borrowing rate is set by the bank and is adjusted each quarter. The rate is dependent on the T-Bill rate, the Prime Rate and your firm's credit rating. Each firm in the simulation has an individual short term borrowing rate. The bank (in the

simulation) considers the credit rating and existing liabilities of a firm before setting a short-term interest rate. The interest rate given is the annual rate. Divide the rate by four to figure the quarterly short term borrowing rate.

Debt-to-Equity Ratio:

Debt-to-equity is a measure of financial risk undertaken by the firm. Within the simulation, debt-to-equity is a ratio of the total liabilities to total equity. The ratio can be stated as a ratio such as 1-to-1 or it can be divided and read as a percentage. A debt-to-equity ratio of 1-to-1 would indicate that a firm has equal amounts of debt and equity (the percentage figure would be 1.0).

To arrive at your firm's debt-to-equity ratio, divide total liabilities by total equity (both of these figures can be found on the right side of the balance sheet). A ratio of 0-to-1 equity is ultra conservative. An ultra-conservative strategy may be safe but it will restrict the potential growth in the stock price. The firm represented in this example chose to finance their firm entirely with stockholder investment money. They did not take on any debt, and liabilities are at a minimal $17,500 (salary owed but not yet paid to executives), so their debt-to-equity ratio is 0.01.

A debt-to-equity ratio of 1.5 will begin to worry both stock investors and bankers. Above the 1.5 ratio one will find two types of firms: high risk firms pushing financial leverage to its maximum and firms that have lost a great deal of equity who are in financial difficulty. Stockholders start to lower prices on shares of stock once the financial risk becomes excessive. Stock price in the simulation starts to suffer as the firm's debt-to-equity ratio exceeds 1.0. As financial risk increases, investors lower stock values at an increasing rate.

Should your team strive to stay under a 1.0 debt-to-equity ratio? There may be some exceptions. Here are two reasons to exceed the 1.0 standard even if it initially hurts stock price:

- Use of debt resulting in a debt/equity ratio of 1.0 to 2.0 may produce additional earnings per share (EPS), which would boost stock price. The boost may more than offset the decline in stock values caused by the increased financial risk. The firm must have very profitable opportunities to make this strategy work.
- Excessive use of debt early in the simulation may be justified even if stock prices plummet, as long as the debt is used to execute a long-term strategy. Issuing few shares of stock and instead borrowing funds early to secure markets might produce large profits by the end of the simulation. The profits will increase the equity section each quarter, which will slowly reduce the debt/equity ratio. Eventually (if the firm survives the early quarters) the firm will emerge near the end of the simulation with a low debt/equity ratio, huge market share, huge profits and since they have so few shares outstanding, huge, huge, huge EPS (earnings per share). Stockholders will go nuts trying to buy the firm's stock. This strategy is very, very risky.

Association Global View

Sales and Marketing Report

Sales and Marketing Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Total Unit Sales	**313**	**1516**	**387**	**2000**
Wholesale Orders	**0**	**0**	**0**	**0**
Backorders	**0**	**0**	**0**	**14**
Returns	**0**	**0**	**0**	**278**
Sales Lost	**0**	**0**	**0**	**0**
Sales Reps	**2**		**2**	
Base Salary	**4000**		**4000**	
Sales Commissions	**2.00**	**3.00**	**2.00**	**3.00**
Product Prices	**150.00**	**300.00**	**150.00**	**300.00**
Market Share:	**5.0%**	**5.0%**	**7.0%**	**3.0%**
Advertising Budget	**10000**	**10000**	**10000**	**10000**

Sales and Marketing Report

Total Unit Sales:

Total unit sales are the number of units sold by type of product in each area. Unit Sales are the sum of current quarterly sales, wholesale sales, and last quarter's backorders. In this example, Firm 11's Area 1 Product 1 sales totaled 313 units, all from this quarter.

Wholesale Orders:

Wholesale orders are the total number of units sold to another firm within the simulation. If your firm enters a contract to sell product to another firm in the simulation, the sales will be listed under wholesale orders. The firm in this example did not have any contract sales and thus, wholesale orders are at zero for each product in each area.

Backorders:

Backorders are orders your firm could not be filled this quarter. Backorders are first in line to be filled next quarter, at last quarter's price or at the coming quarter's price if it is lower.

If you have backorders, be sure to add those backorders to your next quarter's forecasted demand. Units ordered will need to meet both your new forecasted demand plus backorders.

Returns:

Returns are units of product that failed to meet your standards when:

- The case was being loaded on transport for shipping to your client
- Your customer returned the product on inspection or perhaps an irate customer came storming into the retail store and demanded satisfaction.

Returns from either source are due mainly to poor quality control. Once returned, the units are reprocessed and resold in the same quarter. If not sold, the reprocessed units are included in the finished goods inventory. The cost of re-working returns is approximately 30% of the unit's sales price (RETURNS x PRICE x .30). The reprocessing cost will show up as a reduction in sales revenues on the income statement for that quarter.

Additional expenditures in quality control will help eliminate the return problem. However, a careful analysis between cost of returns (including poor image) and cost of quality control should be conducted in order to achieve the desired product image with the least cost. Be aware that even your best quality control might randomly in such quarters still allow some returns.

Expenditures on quality control should correspond with units available for sale from your firm. However, damage may occur while in the warehouse. Therefore, units are again inspected at the time of shipment from your warehouse, as well as at the time of arrival to your warehouse from the manufacturer. Even though the manufacturer you purchase from may have an excellent quality control budget, your firm must also budget for quality control. Set up a quality control budget per unit ordered from your manufacturer plus those already in inventory.

The quality conscious firm should budget on a per unit basis, even though the decision entry asks for the full dollar budget. Do not use the total quality control budget of a competitor as a comparison to your budget. ***We highly recommend you compare your budget as a percent of total sales to that of your competitor. Information is provided in quarter 2 and quarter 4 reports so you can make the comparison.*** The percentage of sales, in dollars, spent on quality control can be calculated to determine if your relative quality matches the competition. Even if your firm has no returns, competitors can enjoy a better quality reputation. Money spent in excess of zero returns, for example, can be used to insure that your product exceeds the expectations of your consumers. The expense to secure quality above zero returns is only of value to firms attempting to differentiate their higher end products through quality reputation.

The quality of your manufacturer is of little importance to you. The simulation sets your quality standard on the basis of your budget not that of the manufacturer. If you have a high budget the manufacturer must have matching quality products or the simulation will automatically send the lower quality products back. When negotiating for production of your goods with a manufacturer, price and on-time delivery are very important items, quality is not important in the negotiations as it is automatically handled by your quality control budget. It is assumed that if you do not have your own quality control budget, any manufacturer can ship you junk and you will accept it at the receiving dock.

Sales Lost:

Sales Lost are from your retail buyers that decided to cancel their orders rather than wait until next quarter for delivery (those firms electing to wait become backorder sales). Firms not waiting for delivery will seek product from another firm in your market group. Firm 11 in our example lost 14 sales of Product2 in Area 2 because they did not have sufficient units in inventory.

Sales Reps:

Sales Reps is the total number of sales reps in each area.

Base Salary:

Base Salary is the amount of salary currently paid to each rep, by area, each quarter.

Sales Commissions:

Sales Commission is the amount of commission paid to reps for each unit of product they sell. Commissions are listed by product type and by area.

Product Prices:

Product Prices are for each product in each area. Area 2 prices are listed in Euros.

Market Share:

Market Share is by product and area. It represents your share of what the firms in your market group sold (current sales plus backorders from last quarter). Market share calculations do not include Ending Sales Lost, Current Backorders, or Sales Lost. If there were five firms in your market group, then your "fair share" of the market would be 20%. Given 8 firms (the maximum in any one market group), a "fair share" would be 12.5%. In our example, Firm 11 captured only 5% market share for Product 1 in Area 1. A 5% market share is very poor unless the firm has captured a very upper end niche market.

Association Global View

Production Report - Firm 11

Production Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Production Shift 1	0	0	0	0
Production Shift 2	0	0	0	0
Finished Goods Inventory	**687**	**484**	**613**	**0**
Inventory Unit Cost	**80**	**115**	**80**	**115**
Production Unit Cost	0.00	0.00	0.00	0.00
	Type 1	Type 2	Type 1	Type 2
Raw Materials Inventory	0	0	0	0
RM units/FGU Product 1	6	12	6	12
RM units/FGU Product 2	12	25	12	25
	Stage 1	Stage 2	Stage 1	Stage 2
Labor Hours - Shift 1	0	0	0	0
Labor hrs/FGU Product 1	1.700	2.000	3.000	2.500
Labor hrs/FGU Product 2	3.000	2.500	3.000	2.500
New Construction (hours)	0	0	0	0

Production Report

The production report is a subcategory of the Firm Report. Most information provided in the Production report pertains to manufacturing product. The only information your firm will use from the Production Report is the Finished Goods Inventory and the Inventory Unit Cost.

Finished Goods Inv.:

Finished Goods Inventory shows the number of units that remain in the firm's public warehouse at the end of the quarter. The finished goods left in inventory are on hand ready for sale in the coming quarter. After forecasting sales by area and product for next quarter, subtract the units left in inventory to find how many units to order from your manufacturers.

You should work with one area and one product at a time when forecasting and determining your order size from manufacturers. The contracts program allows you to order any one product for any one area. Your manufacturer will send the product direct to your warehouse in the area you specify. Since the manufacturer pays for shipping it is must cheaper to have them ship to each of your areas. If you determine that you have too many products in one area (perhaps a team member had all P1 product sent to A1), then you will need to enter a firm decision to ship product from your A1 warehouse to your A2 warehouse. You pay the freight bill if you ship in this manner. It is better to plan ahead and have your manufacturer deliver straight to the area you specify.

Inventory Unit Cost:

Inventory Unit Cost is calculated by averaging the unit costs of old inventory from previous quarters with the new units purchased. Since there was no previous inventory, the exact cost of the units as ordered in the example is the average inventory cost. In future quarters, if there are some finished goods inventory carried over, the average inventory cost will combine the old and new units purchased and provide the new weighted average cost. Inventory unit cost times the number of units sold is the cost of goods sold recorded as an expense on the income statement.

Association Global View

Income Statement

Revenue		Expenses	
Sales Revenue	**$1187219**	**Cost of Goods Sold**	**$460340**
Less: Processing Costs	**$1091**	**Advertising**	**$40000**
Net Sales	**$1186128**	**Quality Control**	**$36000**

Investment Income 0:000	$0	**Bad Debts**	**$2162**
Marketable Securities	$0	Product Improvement	$0
		Engineering Studies	$0
		Sales Expense	**$27948**
		Administrative Expense	**$50000**
		Invt/Shipping Charges	**$1216**
		Maintenance	$0
		Depreciation	$0
		Interest Expense	**$56700**
		Factor Cost	$ 0
		Miscellaneous Expense	**$66000**
Income Before Taxes	**$ 445762**	**Income Taxes**	**$ 212341**
Net Income	**$ 233421**		

The Income Statement

Sales Revenue:

Sales Revenue is calculated as:

- Previous quarter's backorders x backorder price +
- Sales to retailers this quarter at this quarter's price in dollars in NAFTA +
- Sales to retailers this quarter at this quarter's price in Euros in the EU convert by the exchange rate.

In our Firm 11 example, there are no backorders because this is the first quarter of operation. The sales revenue for firm 11 is found as:

- $150 (the sales price for Product 1 in Area 1, found on the Industry Report) x 313 (unit sales for a1p1 this quarter). Repeat for each product type in each area, then total:

P1A1: $150 x 313 = $46,950
+
P2A1: $300 x 1516 = $454,800
+
P1A2: $156.25 x 387 =$60,468.75 ***$150 X 1/.96 = $156.25**
+
P2A2: $312.50 x 2000 = $625,000 ***$300 X 1/.96 = $312.50**

= Sales Revenue $1,187,218.75

****Area 2 prices are in EUROs, so you will need to convert the prices to dollars using the exchange rate on the Economic Report, before calculating sales revenue.***

Less Restocking Expense:

This is the expense of putting reprocessed units back into inventory. Returned items are reprocessed and put back into that quarter's inventory for sale in that quarter. There was sufficient time to reprocess Firm 11's defective units and sell them again. If you look at Sales and Marketing portion of the Firm Report, you will see that Firm 11 reprocessed a total of 9 units of P2A1 and 3 units of P2A2.

The original sale, which included the 12 defective units, was not affected as the defective units were returned and replacements (perhaps the same units) were sent. Reprocessing costs are calculated as 30% of the unit's sales price, multiplied by the number of units reprocessed:

9 units P2A1 x .30 x $300 = 810
+
3 units P2A2 x .30 x 312.50 = 281.25
Total for entry "Less Restocking Expense" = $1,091.25

Net Sales:

Net Sales is the total sales revenue less the reprocessing costs.

$1,187,218.75 (Sales Revenue) - $1091.25 (Restocking Expense) = $1,186,127.5

Cost of Goods Sold:

Cost of Goods Sold is the weighted average cost of finished goods from previous quarters and the cost of goods purchased this quarter, times the number of units sold.

In our example, Firm 11 sold a total of 313 P1 and 1,516 P2 units in NAFTA, and 387 P1 and 2,000 P2 units in the EU. Multiply the number of units of each product sold in each area by:

- If finished goods inventory were on hand then use Unit Inventory Cost *from last quarter's production statement;*
- If no finished goods were available or you ran out, then multiply the remaining units sold by the cost of the goods you bought through contracts.

In this example there were no finished goods in inventory so the cost used is the contract cost.

A1P1: 313 x $ 80 = $25,040
+
A2P1: 387 x $ 80 = $30,960
+
A1P2: 1,516 x $115 = $174,340
+
A2P2: 2,000 x $115 = $230,000
Cost Of Goods Sold = $460,340

Advertising:

Advertising is a budgeted decision made by the team. In this example, the firm spent $10,000 to promote each type of product in both areas for a total of $40,000.

Quality Control:

Quality Control is a budgeted decision used to reduce returns and improve product quality image. In our example, Firm 11 budgeted $36,000 for quality control.

Bad Debts:

Bad Debts are mainly a function of the credit policy selected by the firm and the amount of sales. Credit policy selected by the firm also influences the number of units sold. The tighter your firm's credit policy, the fewer bad debts and the fewer units sold. Find a balance that works well for your firm's goals.

In our example firm 11 had a credit policy of 2. Their bad debts were a minimal $2,162, which is less than 1% of total sales revenues.

Sales Expense:

Sales Expense is the total of commissions paid out to reps for each unit of product sold (including backorders) and salaries paid to sales representatives. In our example, Firm 11 has 2 sales reps in each area for a total of 4. NAFTA and EU area sales reps are both earning a salary of $4,000 per quarter as are EU sales reps, regardless of sales volume. Firm 11 has commissions for Product 1 set at $2 and Product 2 commissions are set at $3 per unit sold. All salaries and commissions are in U.S. dollars so there is no need to convert. Thus, the calculation is:

2 NAFTA Sales Reps x $2,000 = $8,000
+
2 EU Sales Reps x $2,000 = $8,000
+
P1A1: $2.00 commission x 313 units = $626
+
P1A2: $2.00 commission x 387 = $774
+
P2A1: $3.00 commission x 1,516 = $4,548
+
P2A2: $3.00 commission x 2,000 = $6,000

Sales Expense = $27,948

****Sales expense will never be higher than determined in this calculation. Sales expense might be lower since sales lost by a competitor by random luck could become your sale. Commissions are not paid on those types of sales. Management is advised to calculate sales expenses and match it against actual sales expense as report on the income statement at least twice a year.***

Administrative Expense:

The administrative expense was incurred as administrators starting the business earned salary.

Inventory/Shipping Charges:

The Inventory/Shipping Charges is composed of two types of expenses:

- Inventory Carrying Cost
- Shipping Expense

At the end of the quarter, the product your firm was not able to sell is warehoused at a commercial warehouse. This warehouse charges your firm for each unit of product held in inventory for your firm. Within the Scent Industry, each product type has a per unit storage cost.

- Inventory Carrying Cost Per unit of Product 1 is .60 cents per quarter
- Inventory Carrying Cost Per unit of Product 2 is .90 cents per quarter

In our example, Firm 11 had a total inventory carrying cost of $1,216 as they had a total of 1,300 units of Product 1 and 484 units of Product 2 left in inventory.

1,300 units of P1 x $.60 = $780
+
484 units of P2 x $.90 = 435.60

Inventory Carrying Cost = $1,215.60

If Firm 11 had shipped product from one area to another they would have incurred a charge for each unit of product they shipped. Refer to Appendix E for specifics on costs and requirements for shipping product.

Interest Expense:

If your firm issued bonds, term loans, or if a special loan was provided automatically due to lack of cash, your firm will have incurred an interest expense. Interest expense is calculated as outlined below:

1. **Interest on Short Term Loan:** interest is not due until the following quarter. In the following quarter, the loan is automatically paid off in full along with interest. Multiply the loan amount by 1/4 of your firm's annual unique short-term rate reported on the form along with credit rating.
2. **Interest on Term Loan:** multiply the dollar amount of the loan by 3% (12% divided by 4 quarters).
3. **Interest on Bonds:** this is the interest money you pay on the bonds. Multiply the dollar amount of the bonds times 2.5% (10% annually divided by 4 quarters).
4. **Amortized Bond Discount:** amortized bond discounts are included in the interest expense. As discussed earlier, multiply last quarter's bond discount number on the balance sheet by the amortization rate of 5% per quarter.
5. **Interest from Beginning Special Loan comes from two sources:**
    a. This special loan is difficult to trace in your financial statements but it can be a major cost. Therefore, it is very important to understand the process in order to avoid these very expensive loans. When you order product from a manufacturer through contracts, the simulation automatically *and immediately* checks your

cash balance on your *previous balance sheet.* If cash is insufficient to pay for your finished goods, the simulation will automatically lend cash to you immediately. The program then collects cash back as you sell your product throughout the quarter. Thus, by the time the quarter ends you will have repaid the special loan. The loan will not appear on the balance sheet as a liability since it was taken out and paid back in the same quarter. But the interest will still be paid. Check the cash flow report to see if this happened to your firm. *All firms will have a special loan of this type in the first quarter of the simulation as you are going to order product from a manufacturer but you do not even have a balance sheet or even have stock sold prior to the first quarter. After the first quarter, always plan to end up with enough cash to pay for contract purchases coming up the following quarter.*

In the example, First Quarter Decisions included the purchase of product via Contracts. The simulation makes the product purchase before any quarterly decisions are considered such as the issuing of Stocks or Bonds. Here is how Firm 11 interest was determined. Your result will be similar on your very first decision set.

Order 1,000 P1 for NAFTA and 1,000 P1 for EU x $80 = $160,000 special loan
+
Order 2,000 P2 for NAFTA and 2,000 P2 for EU x $115=$460,000 special loan
+
Bank automatically issues a safety balance = $10,000 to cash special loan

Total special loan = $630,000 which x 9% = $56,700 interest

b. This loan is the result of running short of cash by the end of the quarter. Interest is not due on this type of special loan until the following quarter. The loan cost is 36% annual, 9% per quarter. Check last quarter's balance sheet to see if you had a special loan. Take 9% of that loan as interest in the current quarter. (No decision entry is required to take out or to repay a special loan. They are repaid automatically each quarter.)

Miscellaneous:

The Misc. account on the income statement is composed of the following:

1. Hiring new sales reps = $12,000 for each new experienced Sales Rep hired
2. Hiring Trainees = $3,000 x each trainee hired
3. Assigning Trainees as Sales Reps = $3,000 per trainee assigned as a rep
4. Transferring Sales Reps = $3,000 for each sales rep that is transferred to a new area
5. Consulting Contracts = 2% of the total dollar value of the consulting contract
6. Contract to sell finished goods to another simulation team = 6% of the sale value.

In our example Firm 11 had a total miscellaneous expense of $66,000.

$12,000 x 4 new Sales Reps hired = $48,000
+
$3,000 x 6 new Trainees hired = $18,000

Total Miscellaneous = $66,000

Income Taxes:

Income Taxes are paid quarterly at the rate of 22% on the first $6,250 earned and 48% on the balance of earnings. Losses can offset taxes paid over the last three years. If you paid taxes and then have a loss, a tax rebate will be provided and shown as a negative tax (-). A new firm taking a large loss would carry the loss forward for up to three years. The 48% tax rate reflects U.S. federal, state and local income taxes, plus other miscellaneous taxes. In this example Firm 11 paid $216,846 in taxes.

$6,250 x .22 = $1375

+

(445,762 - 6,250) x .48 = 210,965.76

Total Taxes Paid = $212,340.76

Association Global View

Balance Sheet - Firm 11

Assets			**Liabilities**	
Cash		**1185699**	**Accounts Payable**	**17500**
Accounts Receivable		**473562**	Special Loan	0
Marketable Securities		0	Short Term Loan	0
Inventories:			Term Loan	0
Finished Goods	**159660**		Bonds	0
Raw Materials	0		**Total Liabilities**	**17500**
Total Inventories		**159660**		
Manufacturing Plants			**Equity**	
Plant and Equip.	0		**Common Stock**	**400000**
-Accum. Depr.	0		**Other Paid In**	**1168000**
Net Plant		0	Unamort. Disc	0
			Retained Earnings	**233421**
			Total Equity	**1801421**
Total Assets		**1818921**	**Liabilities&Equity**	**1818921**

Balance Sheet

The stock sale for firm 11 was recorded as $400,000 shares sold with $1 of the sale recorded as "Common Stock" ($400,000) and the balance as "Other Paid In" ($1,168,000). Total funds from the sale of stock was 400,000 X $3.92 per share equals $1,568,000.

The Income Statement and Balance Sheet Connection

It is sometimes difficult for students to see the link between the income statement and the balance sheet. A balance sheet provides the starting point for the next period (quarter in the simulation). Then the firm begins the quarterly business operations. When the quarter is finished, a new balance sheet is prepared. An analysis of the balance sheet changes from the end of the last period to the end of the current period will allow management and investors to measure management's and the firm's performance. To aid management and investors, the income statement is prepared which summarizes all the changes between the two balance sheets that relate to business operations. The success or failure of the operations, are presented in the income statement as a net income or loss.

The income statement does not consider cash flows. The income statement does not consider shifts of value between accounts on the balance. For example, spending cash to buy finished goods is a major balance sheet change. The income statement does not reflect the change. The income statement only reflects finished goods as a cost when those goods are sold as part of the operations of the firm.

In this case, Firm 11 was able to secure a healthy profit of $233,421 in its opening quarter. That meant the real assets (shown on the left hand side of the balance sheet) increased because of management's operation of the firm. In the Introduction to Business firms the accounts that might have gone up in value for the quarter are cash, accounts receivable, and finished goods in inventory. To make the balance sheet balance, the right side of the balance sheet must to reflect the increase in assets due to operations (called profits). The profits or losses earned in a quarter go into the retained earnings account, which is one of the four stockholder accounts used in this simulation.

Notice that the retained earnings account (shown on the balance sheet) is exactly the same as the net income (shown on the income statement). That is because the firm started business this quarter and there was no previous balance. If the firm looses assets next quarter (loss on the income statement), the retained earnings will be written down by that amount. Next quarter, if the firm earns a profit, assets will increase on the left side of the balance sheet and on the right side of the balance sheet, the profit will be recognized by adding the amount of profit to the $233,421 already recorded in retained earnings.

Firm 11's opening quarter profit will make stockholders very happy, which is reflected in the ending stock price being higher than the IPO price. Only the IPO price is entered into the balance sheet. Changes in stock prices do not affect the firm or its balance sheet. Stocks that trade in the market are between a stock buyer and a stock seller. The firm is no longer involved. The stockholder accounts are the last four listings on the right side of the balance sheet that make up total equity.

Cash Flow Report

The income statement does not provide enough information to determine how much cash came in and how much cash went out over a quarter. The income statement is concerned only about the dollar value of assets. A cash sale and a credit sale are the same

thing as shown on the income statement. To sort out cash only transactions, a separate statement is required, called the Cash Flow Report. The Cash Flow Report gives a more precise breakdown of cash inflows and disbursements over the quarter.

Part 1 of the report is "Changes in Capital Accounts". These are the longer-term accounts that would affect cash if they increased or decreased. They are listed as a reference to remind you of major changes that took place from last quarter to this quarter.

Part 2 of the report is "Beginning Cash Balance" taken last quarter's balance sheet less any purchases of finished goods through contracts plus the addition of $10,000 extra cash over the purchase of finished goods if a temporary special loan was required. Note the $10,000 beginning cash balance, due to the firm's need for a special loan to buy products in their first quarter decisions.

Part 3 of the report shows all cash inflows on the left side and all cash outflows for the quarter on the right side. The balance of inflows and outflows is shown in two places; on the left near the bottom is the balance according to this report; on the right near the bottom is the balance according to your firm's accounting program inside the simulation. It would be nice if they were exactly the same.

Association Global View

Cash Flow Report - Firm Report

Report for Quarter 1 Year 1

Changes in Capital Accounts			
Account	**Last Qtr**	**This Qtr**	**Change**
Bonds	**0**	**0**	**0**
Shares	**0**	**400000**	**400000**
Other Paid in Capital	**0**	**1168000**	**1168000**
Unamortized Disct	**0**	**0**	**0**
Retained Earnings	**0**	**233421**	**233421**

Equity	**0**	**1801421**	**1801421**

Beginning Cash Balance =10,000					
Cash Inflows			**Cash Disbursements**		
Net Cash Sales	**712565**		Raw Mtls at Market *.85	0.00	
Investment Income	0.00		Mfg Labor Costs *.85	0.00	
Income from Subsidiary	0.00		**Bad Debts Expense**	**2162**	
Collection of Receivables	0.00		**Advertising Expense**	**40000**	
Receivables Factored	0.00		**Quality Control Expense**	**36000**	
New Special Loan	**0.00**		Product Improvement	0.00	
New Short Term Loan	0.00		Engineering Studies	0.00	
Change in Term Loan	0.00		**Sales Expense**	**27948**	
New Bond Less Discount	0.00		**Administrative Expense *.65**	**32500**	
New Stock Issue	**1568000**		**Inventory/Shipping costs**	**1216**	
Cash Available for Operations	**2290565**		Maintenance Expense	0.00	
			Interest Expense	**56700**	
			Factoring Expense	0.00	
			Miscellaneous Expense	**66000**	
			Income Tax	**212341**	
			Beginning Short Term Loan	0.00	
			Beginning Special Loan	**630000**	
			Prepay Bonds	0.00	
			Repurchase Common Shares	0.00	
			Cash Dividends Paid	0.00	
			Raw Mtls Futures *.70	0.00	
			New Construction	0.00	
			Total Cash Disbursements	**1104867**	
Computed Ending Cash Bal.	**1185698**		**Quarterly Stmt Cash Bal.**	**1185699**	
Computed minus Actual Bal.	**-1**				

The cash flow report shows you where your cash came from and where it went during the quarter. Remember this is the record of your CASH, which may be different from profit or loss numbers claimed on the income statement. For example, you may have $50000 worth of sales on your income statement but only $30,000 as net sales on your cash flow report (60% of sales become cash immediately; the remainder will come in next quarter). The credit sales would be recorded as accounts receivable and represent the other $20,000 of sales.

"Cash Available for Operations" is an important number that shows the amount of cash the firm had to work with for the quarter. In this example, the Firm had $10,000 to start with due to the special loan, which included an extra $10,000 for the cash account.

"***Total Cash Disbursements***" lists cash payments during the quarter.

"Computed Ending Cash Balance" is found by subtracting the cash disbursements from the cash available for operations.

"Computed Minus Actual Balance" is a test to see if the cash flow reporting system is in error or if an accounting error was made in the firm.

What if Computed Minus Actual is Greater than Zero?

The program that runs your firm's accounting system is 99.8% accurate. The program that runs your cash flow report audit is about 95% accurate. What is taking place is a cash flow program is attempting to document the real cash flow in the firm. Rounding errors take place and accounts payable in the firm are not consistent. One quarter your firm's accounting program will use 30% of executive salaries as carried over to the next quarter in accounts payable. Then, because there might be fewer days in the next quarter, the program uses perhaps 29.2%. The cash flow report cannot duplicate the precision used in the simulation but it can get very close. We recommend you overlook differences in computed minus actual balances that fall below $1,000. If large numbers appear, you may have employee theft or an accounting error. Contact your Global View tutor or mentor immediately.

Auditing the books (accounts) of a corporation is generally trusted to Certified Public Accounts. The auditors are not employees of the firm but rather trusted external accounting firms. They report back to the shareholders that they have examined the books and found everything to be in order. Tracing cash flows through this small simulated firm is a difficult process. Imagine tracing cash flows and reviewing the entire accounting process of firms such as Yahoo or Royal Dutch Shell. If you like working with numbers and accounts such as this, consider a career in accounting or special areas of finance and law such as Certified Financial Planner or a tax attorney.

Beginning versus New Special Loan:

A "beginning special loan" is a loan that was on the firm's balance sheet at the end of the previous quarter. It could be that you had no loan on your balance sheet last quarter and no special loan on your balance sheet this quarter, yet you show a large beginning special loan in the cash flow report. How is this possible?

A beginning special loan might be triggered prior to the start of the quarter due to contract purchases that exceed your firm's cash balance. This will certainly be true in your very first set of decisions. Over the course of the quarter, if the firm brings in enough cash through revenues or financing to repay the beginning special loan, the special loan will not appear on the balance sheet. The beginning special loan, in this case, only appears on the cash flow report.

If the firm does not generate enough cash to repay the beginning special loan by the end of the quarter the bank automatically payoff the "beginning special loan" (cash outflow) and create a "new special loan" (cash inflow).

Confidential Firm Reports

The confidential reports for firms 12, 13, 14, 15, 16 and 17 are presented for your review in this section. We recommend you conduct a general review of each firm's balance

sheet and income statement. The firms represent a variety of visions and related strategies. Once your team has established its initial vision review the confidential reports of the two firms that most closely match your expected strategy. A serious review of the two firms will produce guidelines that team members can debate and hone until your unique vision, strategy and objectives are ready to implement into decisions.

Do not let the profit of Firm 11 or the loss of Firm 17 dictate your team's visions and resulting decisions. Firm 17 hired 20 sales representatives at a onetime cost of $240,000. This is a large expense, but in future quarters, Firm 17 will have the advantage of having more sales reps in their region to generate sales. The initial expense was very high but it will not occur in the following quarter. Perhaps it would have been more prudent to hire only 4 sales reps in the first quarter and also hire 16 trainees for assignment the following quarter, but this would certainly have affected sales volume.

Firm 11 enjoyed a good position in the market. However, in the following quarter Firm 12 or 13 might move into their upper end market and severe competition could create losses for Firm 11. It is easier for middle-sized firms to move up scale rather than down scale to compete with firms such as Firm 17. However, if competition leaves Firm 11 to have the entire upper end market, it will do very well.

Analyze your competitor's moves in the trial runs. Gather as much information as you can about the markets in the trial runs. Analyze the following confidential firm reports so you know what to expect on the first run across a wide range of strategies. Let the games begin!

Firm Reports for Firm 12

Credit Report	
Credit Rating	**3.703**
Short Term Rate	**6.939**
Debt to Equity Ratio	**0.69**

Sales and Marketing Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Total Unit Sales	**439**	**1516**	**442**	**1736**
Wholesale Orders	**0**	**0**	**0**	**0**
Backorders	**0**	**0**	**0**	**0**
Returns	**2**	**0**	**0**	**8**
Sales Lost	**0**	**0**	**0**	**0**
Sales Reps	**3**		**3**	
Base Salary	**3000**		**3000**	
Sales Commissions	**2.50**	**2.50**	**2.50**	**2.50**
Product Prices	**160.00**	**300.00**	**160.00**	**300.00**
Market Share:	**7.0%**	**5.0%**	**8.0%**	**3.0%**
Advertising Budget	**12000**	**12000**	**12000**	**12000**

Production Report				
	Area 1		**Area 2**	
	Product 1	**Product 2**	**Product 1**	**Product 2**
Finished Goods Inventory	**561**	**484**	**558**	**264**
Inventory Unit Cost	**80**	**115**	**80**	**115**

Firm Reports for Firm 12 (continued)

Income Statement			
Revenue		**Expenses**	
Sales Revenue	**$1141208**	**Cost of Goods Sold**	**$444460**
Less: Processing Costs	**$846**	**Advertising**	**$48000**
Net Sales	**$1140362**	**Quality Control**	**$36000**
Investment Income 0:000	$0	**Bad Debts**	**$2578**
Marketable Securities	$0	Product Improvement	$0
		Engineering Studies	$0
		Sales Expense	**$28290**
		Administrative Expense	**$50000**
		Invt/Shipping Charges	**$1345**
		Maintenance	$0
		Depreciation	$0
		Interest Expense	**$82640**
		Factor Cost	$ 0
		Miscellaneous Expense	**$90000**
Income Before Taxes	**$ 357050**	**Income Taxes**	**$ 169759**
Net Income	**$ 187291**		

Balance Sheet				
Assets			**Liabilities**	
Cash		**1856849**	**Accounts Payable**	**17500**
Accounts Receivable		**456540**	Special Loan	0
Marketable Securities		0	Short Term Loan	0
Inventories:			Term Loan	0
Finished Goods	**175540**		Bonds	**1000000**
Raw Materials	0		**Total Liabilities**	**1017500**
Total Inventories		**175540**		
Manufacturing Plants			**Equity**	
Plant and Equip.	0		**Common Stock**	**300000**
-Accum. Depr.	0		**Other Paid In**	**1002000**
Net Plant		0	Unamort. Disc	-17862
			Retained Earnings	**187291**
			Total Equity	**1471429**
Total Assets		**2488930**	**Liabilities&Equity**	**2488930**

Firm Reports for Firm 12 (continued)

Cash Flow Report

Changes in Capital Accounts

Account	Last Qtr	This Qtr	Change
Bonds	**0**	**1000000**	**1000000**
Shares	**0**	**300000**	**300000**
Other Paid in Capital	**0**	**1002000**	**1002000**
Unamortized Disct	**0**	**-17862**	**17862**
Retained Earnings	**0**	**187291**	**187291**
Equity	**0**	**1471429**	**1471429**

Beginning Cash Balance =10,000

Cash Inflows		Cash Disbursements	
Net Cash Sales	**683822**	Raw Mtls at Market *.85	0.00
Investment Income	0.00	Mfg Labor Costs *.85	0.00
Income from Subsidiary	0.00	**Bad Debts Expense**	**2578**
Collection of Receivables	0.00	**Advertising Expense**	**48000**
Receivables Factored	0.00	**Quality Control Expense**	**36000**
New Special Loan	**0.00**	Product Improvement	0.00
New Short Term Loan	0.00	Engineering Studies	0.00
Change in Term Loan	0.00	**Sales Expense**	**28290**
New Bond Less Discount	**981197**	**Administrative Expense *.65**	**32500**
New Stock Issue	**1302000**	**Inventory/Shipping costs**	**1345**
Cash Available for Operations	**2977019**	Maintenance Expense	0.00
		Interest Expense	**817000**
		Factoring Expense	0.00
		Miscellaneous Expense	**90000**
		Income Tax	**169759**
		Beginning Short Term Loan	0.00
		Beginning Special Loan	**630000**
		Prepay Bonds	0.00
		Repurchase Common Shares	0.00
		Cash Dividends Paid	0.00
		Raw Mtls Futures *.70	0.00
		New Construction	0.00
		Total Cash Disbursements	**1120171**
Computed Ending Cash Bal.	**1856848**	**Quarterly Stmt Cash Bal.**	**1856849**
Computed minus Actual Bal.	**-1**		

Firm Reports for Firm 13

Credit Report	
Credit Rating	**1.782**
Short Term Rate	**5.669**
Debt to Equity Ratio	**0.001**

Sales and Marketing Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Total Unit Sales	**439**	**1819**	**497**	**4051**
Wholesale Orders	**0**	**0**	**0**	**0**
Backorders	**0**	**0**	**0**	**0**
Returns	**0**	**1**	**0**	**0**
Sales Lost	**0**	**0**	**0**	**0**
Sales Reps	**5**		**5**	
Base Salary	**2000**		**2000**	
Sales Commissions	**1.75**	**1.75**	**1.75**	**1.75**
Product Prices	**138**	**200**	**138**	**200**
Market Share:	**7.0%**	**6.0%**	**9.0%**	**7.0%**
Advertising Budget	**15000**	**15000**	**15000**	**15000**

Production Report				
	Area 1		**Area 2**	
	Product 1	**Product 2**	**Product 1**	**Product 2**
Finished Goods Inventory	**3561**	**7181**	**2503**	**3949**
Inventory Unit Cost	**80**	**115**	**80**	**115**

Firm Reports for Firm 13 (continued)

Income Statement			
Revenues		**Expenses**	
Sales Revenue	**$1339771**	**Cost of Goods Sold**	**$749930**
Less: Processing Costs	**$60**	**Advertising**	**$60000**
Net Sales	**$1339711**	**Quality Control**	**$97500**
Investment Income 0:000	$0	**Bad Debts**	**$3488**
Marketable Securities	$0	Product Improvement	$0
		Engineering Studies	$0
		Sales Expense	**$33300**
		Administrative Expense	**$50000**
		Invt/Shipping Charges	**$13655**
		Maintenance	$0
		Depreciation	$0
		Interest Expense	**$227250**
		Factor Cost	$ 0
		Miscellaneous Expense	**$150000**
Income Before Taxes	**$ -45413**	**Income Taxes**	**$ 0**
Net Income	**$ -45413**		

Balance Sheet				
Assets			**Liabilities**	
Cash		**331802**	**Accounts Payable**	**17500**
Accounts Receivable		**535215**	Special Loan	0
Marketable Securities		0	Short Term Loan	0
Inventories:			Term Loan	0
Finished Goods	**1765070**		Bonds	0
Raw Materials	0		**Total Liabilities**	**17500**
Total Inventories		**1765070**		
Manufacturing Plants			**Equity**	
Plant and Equip.	0		**Common Stock**	**1000000**
-Accum. Depr.	0		**Other Paid In**	**1660000**
Net Plant		0	Unamort. Disc	0
			Retained Earnings	**-45413**
			Total Equity	**2614587**
Total Assets		**2632087**	**Liabilities&Equity**	**2632087**

Firm Reports for Firm 13 (continued)

Cash Flow Report

Changes in Capital Accounts

Account	Last Qtr	This Qtr	Change
Bonds	**0**	**0**	**0**
Shares	**0**	**1000000**	**1000000**
Other Paid in Capital	**0**	**1660000**	**1660000**
Unamortized Disct	**0**	**0**	**0**
Retained Earnings	**0**	**-45414**	**-45414**
Equity	**0**	**2614587**	**2614587**

Beginning Cash Balance =10,000

Cash Inflows			Cash Disbursements		
Net Cash Sales	**804495**		Raw Mtls at Market *.85	0.00	
Investment Income	0.00		Mfg Labor Costs *.85	0.00	
Income from Subsidiary	0.00		**Bad Debts Expense**	**3488**	
Collection of Receivables	0.00		**Advertising Expense**	**60000**	
Receivables Factored	0.00		**Quality Control Expense**	**97500**	
New Special Loan	**0.00**		Product Improvement	0.00	
New Short Term Loan	0.00		Engineering Studies	0.00	
Change in Term Loan	0.00		**Sales Expense**	**33300**	
New Bond Less Discount	0.00		**Administrative Expense *.65**	**32500**	
New Stock Issue	**2660000**		**Inventory/Shipping costs**	**13655**	
Cash Available for Operations	**3474496**		Maintenance Expense	0.00	
			Interest Expense	**227250**	
			Factoring Expense	0.00	
			Miscellaneous Expense	**150000**	
			Income Tax	**0.00**	
			Beginning Short Term Loan	0.00	
			Beginning Special Loan	**2525000**	
			Prepay Bonds	0.00	
			Repurchase Common Shares	0.00	
			Cash Dividends Paid	0.00	
			Raw Mtls Futures *.70	0.00	
			New Construction	0.00	
			Total Cash Disbursements	**3142694**	
Computed Ending Cash Bal.	**331802**		**Quarterly Stmt Cash Bal.**	**331802**	
Computed minus Actual Bal.	**0**				

Firm Reports for Firm 14

Credit Report	
Credit Rating	3.498
Short Term Rate	6.804
Debt to Equity Ratio	0.95

Sales and Marketing Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Total Unit Sales	627	1819	497	3468
Wholesale Orders	0	0	0	0
Backorders	0	0	0	0
Returns	2	13	0	12
Sales Lost	0	0	0	0
Sales Reps	6		6	
Base Salary	2000		2000	
Sales Commissions	1.50	1.75	1.50	1.75
Product Prices	135	185	135	185
Market Share:	10.0%	6.0%	9.0%	6.0%
Advertising Budget	15000	15000	15000	15000

Production Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Finished Goods Inventory	2373	5181	1503	2532
Inventory Unit Cost	80	115	80	115

Firm Reports for Firm 14 (continued)

Income Statement			
Revenue		**Expenses**	
Sales Revenue	**$1159371**	**Cost of Goods Sold**	**$697925**
Less: Processing Costs	**$1496**	**Advertising**	**$60000**
Net Sales	**$1157875**	**Quality Control**	**$49000**
Investment Income 0:000	$0	**Bad Debts**	**$3443**
Marketable Securities	$0	Product Improvement	$0
		Engineering Studies	$0
		Sales Expense	**$34886**
		Administrative Expense	**$50000**
		Invt/Shipping Charges	**$9267**
		Maintenance	$0
		Depreciation	$0
		Interest Expense	**$202890**
		Factor Cost	$ 0
		Miscellaneous Expense	**$168000**
Income Before Taxes	**$ -117535**	**Income Taxes**	**$ 0**
Net Income	**$ -117535**		

Balance Sheet				
Assets			**Liabilities**	
Cash		**835314**	**Accounts Payable**	**17500**
Accounts Receivable		**464222**	Special Loan	0
Marketable Securities		0	Short Term Loan	0
Inventories:			Term Loan	0
Finished Goods	**1197075**		**Bonds**	**1200000**
Raw Materials	0		**Total Liabilities**	**1217500**
Total Inventories		**1197075**		
Manufacturing Plants			**Equity**	
Plant and Equip.	0		**Common Stock**	**400000**
-Accum. Depr.	0		**Other Paid In**	**1024000**
Net Plant		0	Unamort. Disc	-27354
			Retained Earnings	**-117535**
			Total Equity	**1279111**
Total Assets		**2496611**	**Liabilities&Equity**	**2496611**

Firm Reports for Firm 14 (continued)

Cash Flow Report

Changes in Capital Accounts

Account	Last Qtr	This Qtr	Change
Bonds	**0**	**1200000**	**1200000**
Shares	**0**	**400000**	**400000**
Other Paid in Capital	**0**	**1024000**	**1024000**
Unamortized Disct	**0**	**-27354**	**27354**
Retained Earnings	**0**	**-117535**	**-117535**
Equity	**0**	**1279111**	**1279111**

Beginning Cash Balance =10,000

Cash Inflows			Cash Disbursements		
Net Cash Sales	**693654**		Raw Mtls at Market *.85	0.00	
Investment Income	0.00		Mfg Labor Costs *.85	0.00	
Income from Subsidiary	0.00		**Bad Debts Expense**	**3443**	
Collection of Receivables	0.00		**Advertising Expense**	**60000**	
Receivables Factored	0.00		**Quality Control Expense**	**49000**	
New Special Loan	**0.00**		Product Improvement	0.00	
New Short Term Loan	0.00		Engineering Studies	0.00	
Change in Term Loan	0.00		**Sales Expense**	**34886**	
New Bond Less Discount	**1171206**		**Administrative Expense *.65**	**32500**	
New Stock Issue	**1424000**		**Inventory/Shipping costs**	**9267**	
Cash Available for Operations	**3298860**		Maintenance Expense	0.00	
			Interest Expense	**201450**	
			Factoring Expense	0.00	
			Miscellaneous Expense	**168000**	
			Income Tax	**0.00**	
			Beginning Short Term Loan	0.00	
			Beginning Special Loan	**1905000**	
			Prepay Bonds	0.00	
			Repurchase Common Shares	0.00	
			Cash Dividends Paid	0.00	
			Raw Mtls Futures *.70	0.00	
			New Construction	0.00	
			Total Cash Disbursements	**2463546**	
Computed Ending Cash Bal.	**835314**		**Quarterly Stmt Cash Bal.**	**835314**	
Computed minus Actual Bal.	**0**				

Firm Reports for Firm 15

Credit Report	
Credit Rating	3.596
Short Term Rate	6.869
Debt to Equity Ratio	0.84

Sales and Marketing Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Total Unit Sales	877	5759	718	9000
Wholesale Orders	0	0	0	0
Backorders	0	0	0	8
Returns	6	0	1	0
Sales Lost	0	0	0	161
Sales Reps	7		7	
Base Salary	2000		2000	
Sales Commissions	1.30	1.75	1.30	1.75
Product Prices	130	165	130	165
Market Share:	%	%	%	%
Advertising Budget	25000	25000	25000	25000

Production Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Finished Goods Inventory	2873	3241	2282	0
Inventory Unit Cost	80	115	80	115

Firm Reports for Firm 15 (continued)

Income Statement			
Revenue		**Expenses**	
Sales Revenue	**$2708397**	**Cost of Goods Sold**	**$1824885**
Less: Processing Costs	**$275**	**Advertising**	**$100000**
Net Sales	**$2708122**	**Quality Control**	**$46125**
Investment Income 0:000	$0	**Bad Debts**	**$9690**
Marketable Securities	$0	Product Improvement	$0
		Engineering Studies	$0
		Sales Expense	**$55902**
		Administrative Expense	**$50000**
		Invt/Shipping Charges	**$6010**
		Maintenance	$0
		Depreciation	$0
		Interest Expense	**$275187**
		Factor Cost	$ 0
		Miscellaneous Expense	**$198000**
Income Before Taxes	**$ 142323**	**Income Taxes**	**$ 66690**
Net Income	**$ 75633**		

Balance Sheet				
Assets			**Liabilities**	
Cash		**1438895**	**Accounts Payable**	**17500**
Accounts Receivable		**1083270**	Special Loan	0
Marketable Securities		0	Short Term Loan	0
Inventories:			Term Loan	0
Finished Goods	**785115**		**Bonds**	**1500000**
Raw Materials	0		**Total Liabilities**	**1517500**
Total Inventories		**785115**		
Manufacturing Plants			**Equity**	
Plant and Equip.	0		**Common Stock**	**500000**
-Accum. Depr.	0		**Other Paid In**	**1250000**
Net Plant		0	Unamort. Disc	-35853
			Retained Earnings	**75633**
			Total Equity	**1789780**
Total Assets		**3307280**	**Liabilities&Equity**	**3307280**

Firm Reports for Firm 15 (continued)

Cash Flow Report

Changes in Capital Accounts

Account	Last Qtr	This Qtr	Change
Bonds	**0**	**1500000**	**1500000**
Shares	**0**	**500000**	**500000**
Other Paid in Capital	**0**	**1250000**	**1250000**
Unamortized Disct	**0**	**-35853**	**35853**
Retained Earnings	**0**	**75633**	**75633**
Equity	**0**	**1789780**	**1789780**

Beginning Cash Balance =10,000

Cash Inflows			Cash Disbursements		
Net Cash Sales	**1624852**		Raw Mtls at Market *.85	0.00	
Investment Income	0.00		Mfg Labor Costs *.85	0.00	
Income from Subsidiary	0.00		**Bad Debts Expense**	**9690**	
Collection of Receivables	0.00		**Advertising Expense**	**100000**	
Receivables Factored	0.00		**Quality Control Expense**	**46125**	
New Special Loan	**0.00**		Product Improvement	0.00	
New Short Term Loan	0.00		Engineering Studies	0.00	
Change in Term Loan	0.00		**Sales Expense**	**55902**	
New Bond Less Discount	**1462260**		**Administrative Expense *.65**	**32500**	
New Stock Issue	**1750000**		**Inventory/Shipping costs**	**6010**	
Cash Available for Operations	**4847112**		Maintenance Expense	0.00	
			Interest Expense	**273300**	
			Factoring Expense	0.00	
			Miscellaneous Expense	**198000**	
			Income Tax	**66690**	
			Beginning Short Term Loan	0.00	
			Beginning Special Loan	**2620000**	
			Prepay Bonds	0.00	
			Repurchase Common Shares	0.00	
			Cash Dividends Paid	0.00	
			Raw Mtls Futures *.70	0.00	
			New Construction	0.00	
			Total Cash Disbursements	**3408217**	
Computed Ending Cash Bal.	**1438895**		**Quarterly Stmt Cash Bal.**	**1438895**	
Computed minus Actual Bal.	**0**				

Firm Reports for Firm 16

Credit Report	
Credit Rating	1.666
Short Term Rate	5.592
Debt to Equity Ratio	0.004

Sales and Marketing Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Total Unit Sales	1441	9093	1326	17358
Wholesale Orders	0	0	0	0
Backorders	0	0	0	0
Returns	11	0	5	0
Sales Lost	0	0	0	0
Sales Reps	10		10	
Base Salary	1500		1500	
Sales Commissions	1.50	2.00	1.50	2.00
Product Prices	125.00	140.00	125.00	140.00
Market Share:	23.0%	30.0%	24.0%	30.0%
Advertising Budget	40000	40000	40000	40000

Production Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Finished Goods Inventory	6059	10907	4674	2642
Inventory Unit Cost	80	115	80	115

Firm Reports for Firm 16 (continued)

Income Statement			
Revenue		**Expenses**	
Sales Revenue	**$4157121**	**Cost of Goods Sold**	**$3263225**
Less: Processing Costs	**$608**	**Advertising**	**$160000**
Net Sales	**$4156513**	**Quality Control**	**$53500**
Investment Income 0:000	$0	**Bad Debts**	**$13534**
Marketable Securities	$0	Product Improvement	$0
		Engineering Studies	$0
		Sales Expense	**$86721**
		Administrative Expense	**$50000**
		Invt/Shipping Charges	**$18634**
		Maintenance	$0
		Depreciation	$0
		Interest Expense	**$512100**
		Factor Cost	$ 0
		Miscellaneous Expense	**$270000**
Income Before Taxes	**$ -271201**	**Income Taxes**	**$ 0**
Net Income	**$ -271201**		

Balance Sheet					
Assets			**Liabilities**		
Cash		**349475**	**Accounts Payable**		**17500**
Accounts Receivable		**1660049**	Special Loan		0
Marketable Securities		0	Short Term Loan		0
Inventories:			Term Loan		0
Finished Goods	**2416775**		Bonds		0
Raw Materials	0		**Total Liabilities**		**17500**
Total Inventories		**2416775**			
Manufacturing Plants			**Equity**		
Plant and Equip.	0		**Common Stock**		**2000000**
-Accum. Depr.	0		**Other Paid In**		**2680000**
Net Plant		0	Unamort. Disc		0
			Retained Earnings		**-271201**
			Total Equity		**4408799**
Total Assets		**4426299**	**Liabilities&Equity**		**4426299**

Firm Reports for Firm 16 (continued)

Cash Flow Report

Changes in Capital Accounts

Account	Last Qtr	This Qtr	Change
Bonds	**0**	**0**	**0**
Shares	**0**	**2000000**	**2000000**
Other Paid in Capital	**0**	**2680000**	**2680000**
Unamortized Disct	**0**	**0**	**0**
Retained Earnings	**0**	**-271201**	**-271201**
Equity	**0**	**4408799**	**4408799**

Beginning Cash Balance =10,000

Cash Inflows			Cash Disbursements		
Net Cash Sales	**2496464**		Raw Mtls at Market *.85	0.00	
Investment Income	0.00		Mfg Labor Costs *.85	0.00	
Income from Subsidiary	0.00		**Bad Debts Expense**	**13534**	
Collection of Receivables	0.00		**Advertising Expense**	**160000**	
Receivables Factored	0.00		**Quality Control Expense**	**53500**	
New Special Loan	**0.00**		Product Improvement	0.00	
New Short Term Loan	0.00		Engineering Studies	0.00	
Change in Term Loan	0.00		**Sales Expense**	**86721**	
New Bond Less Discount	0.00		**Administrative Expense *.65**	**32500**	
New Stock Issue	**4680000**		**Inventory/Shipping costs**	**18634**	
Cash Available for Operations	**7186464**		Maintenance Expense	0.00	
			Interest Expense	**512100**	
			Factoring Expense	0.00	
			Miscellaneous Expense	**270000**	
			Income Tax	**0.00**	
			Beginning Short Term Loan	0.00	
			Beginning Special Loan	**5690000**	
			Prepay Bonds	0.00	
			Repurchase Common Shares	0.00	
			Cash Dividends Paid	0.00	
			Raw Mtls Futures *.70	0.00	
			New Construction	0.00	
			Total Cash Disbursements	**6836989**	
Computed Ending Cash Bal.	**349475**		**Quarterly Stmt Cash Bal.**	**349475**	
Computed minus Actual Bal.	**0**				

Firm Reports for Firm 17

Credit Report	
Credit Rating	5.00
Short Term Rate	7.798
Debt to Equity Ratio	1.636

Sales and Marketing Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Total Unit Sales	2130	9093	1658	19669
Wholesale Orders	0	0	0	0
Backorders	0	0	0	0
Returns	11	57	9	53
Sales Lost	0	0	0	0
Sales Reps	10		10	
Base Salary	1200		1200	
Sales Commissions	1.50	1.75	1.50	1.75
Product Prices	120	135	120	135
Market Share:	34.0%	30.0%	30.0%	34.0%
Advertising Budget	50000	50000	50000	50000

Production Report				
	Area 1		Area 2	
	Product 1	Product 2	Product 1	Product 2
Finished Goods Inventory	6870	15907	7342	5331
Inventory Unit Cost	80	115	80	115

Firm Reports for Firm 17 (continued)

Income Statement			
Revenue		**Expenses**	
Sales Revenue	**$4456457**	**Cost of Goods Sold**	**$3610670**
Less: Processing Costs	**$5278**	**Advertising**	**$200000**
Net Sales	**$4451179**	**Quality Control**	**$68000**
Investment Income 0:000	$0	**Bad Debts**	**$14163**
Marketable Securities	$0	Product Improvement	$0
		Engineering Studies	$0
		Sales Expense	**$79694**
		Administrative Expense	**$50000**
		Invt/Shipping Charges	**$27641**
		Maintenance	$0
		Depreciation	$0
		Interest Expense	**$714414**
		Factor Cost	$ 0
		Miscellaneous Expense	**$285000**
Income Before Taxes	**$ -598403**	**Income Taxes**	**$ 0**
Net Income	**$ -598403**		

Balance Sheet					
Assets			**Liabilities**		
Cash		**10000**	**Accounts Payable**		**17500**
Accounts Receivable		**1779829**	**Special Loan**		**814432**
Marketable Securities		0	Short Term Loan		0
Inventories:			Term Loan		0
Finished Goods	**3579330**		**Bonds**		**2500000**
Raw Materials	0		**Total Liabilities**		**3331932**
Total Inventories		**3579330**			
Manufacturing Plants			**Equity**		
Plant and Equip.	0		**Common Stock**		**1000000**
-Accum. Depr.	0		**Other Paid In**		**1710000**
Net Plant		0	Unamort. Disc		-74370
			Retained Earnings		**-598403**
			Total Equity		**2037227**
Total Assets		**5369159**	**Liabilities&Equity**		**5369159**

Firm Reports for Firm 17 (continued)

Cash Flow Report

Changes in Capital Accounts

Account	Last Qtr	This Qtr	Change
Bonds	**0**	**2500000**	**2500000**
Shares	**0**	**1000000**	**1000000**
Other Paid in Capital	**0**	**1710000**	**1710000**
Unamortized Disct	**0**	**-74370**	**74370**
Retained Earnings	**0**	**-598403**	**-598403**
Equity	**0**	**2037227**	**2037227**

Beginning Cash Balance =10,000

Cash Inflows			Cash Disbursements		
Net Cash Sales	**2671349**		Raw Mtls at Market *.85	0.00	
Investment Income	0.00		Mfg Labor Costs *.85	0.00	
Income from Subsidiary	0.00		**Bad Debts Expense**	**14163**	
Collection of Receivables	0.00		**Advertising Expense**	**200000**	
Receivables Factored	0.00		**Quality Control Expense**	**68000**	
New Special Loan	**814432**		Product Improvement	0.00	
New Short Term Loan	0.00		Engineering Studies	0.00	
Change in Term Loan	0.00		**Sales Expense**	**79694**	
New Bond Less Discount	**2421716**		**Administrative Expense *.65**	**32500**	
New Stock Issue	**2710000**		**Inventory/Shipping costs**	**27641**	
Cash Available for Operations	**8627497**		Maintenance Expense	0.00	
			Interest Expense	**710500**	
			Factoring Expense	0.00	
			Miscellaneous Expense	**285000**	
			Income Tax	**0.00**	
			Beginning Short Term Loan	0.00	
			Beginning Special Loan	**7200000**	
			Prepay Bonds	0.00	
			Repurchase Common Shares	0.00	
			Cash Dividends Paid	0.00	
			Raw Mtls Futures *.70	0.00	
			New Construction	0.00	
			Total Cash Disbursements	**8617498**	
Computed Ending Cash Bal.	**9999**		**Quarterly Stmt Cash Bal.**	**10000**	
Computed minus Actual Bal.	**-1**				

Chapter 7

Finance

This chapter will guide your team through the concepts of finance. You will need to read this chapter from two perspectives, that of a manager of a company and that of an investor. Based on these perspectives, you will come to understand the financial decisions that need to be made and the reasoning behind them.

FINANCE

Finance Concepts and Strategy

Funding Sources:

An entrepreneur or team of entrepreneurs starts a business by forming a corporation through some government agency. In the United States, individual States have the right to charter a corporation. The next step for the management team is to sell stock. Raising money for a new firm can be more difficult than creating a vision statement, completing product development or marketing. It is difficult to part investors from their money. Management of many start-up ventures, desperate to sell stock to anyone, seek out relatives, friends, and business associates as potential shareholders.

Most states have laws that prevent entrepreneurs from attempting to sell stock, called **securities**, directly to the general public. Often State laws limit the number of shareholders to a small number, such as twenty. In addition State regulations may require each shareholder to sign a statement that they understand the great risk they are accepting in buying the stock of a new firm. It is rare that the executive team would have the talent, knowledge and experience needed to raise capital for a new venture. The entrepreneurs putting the project together often require the help of specialists that provide or raise money for small and medium sized businesses. The specialists are known as v**enture capitalists**. Venture capitalists fund or jointly fund small start-up or expansion businesses.

Venture capitalists will purchase stock if the analysis of the business plan indicates:

- Great potential in terms of returns in the longer run to stockholders.
- Management is capable, ethical, and will stick to the business plan.
- Initial funding is sufficient or will last until cash flows from sales can power future growth.
- External political and market conditions are appropriate.
- Competition is under control due to the firm's patents, copyrights, or longer term differentiated advantage.
- The venture capitalists' share of the total stock issue is fairly large relative to the capital put into the firm (venture capitalists would negotiate for a large portion of the shares of stock being distributed between the entrepreneurs with the idea, management people running the business, and the capitalists with the money).

The capitalists supply only a portion of the capital needed in exchange for stock and perhaps loans that can be converted into stock at a later date. It is rare that the capitalists would fund 100% of the firm's funding needs. They prefer management also have some financial stake in the firm. Venture capitalists are generally tough, seasoned negotiators who, if not carefully dealt with, will own more than a fair share of your

business. They do however, provide the needed capital for new businesses and can also supply good consulting advice.

Another source of funding exists but generally only for medium sized firms or small firms with a proven record of profits and secure markets. This market is the sale of stock to the general public. Selling stock to the general public is similar to selling an upper end product. You must target wealthier upscale buyers. This highly specialized marketing is the task of an **investment banker**. Investment bankers specialize in selling a firm's new issue of stock or bonds to both the general public and private parties. The very first issue of stock sold to the public by a firm is called an **IPO (initial public offering)**.

Your Firm's Investment Banker and Your IPO

The simulation has an investment banker module built into the program. In making your stock issue decision, the price cannot be entered, just the number of shares to be sold. The investment banker module then issues the IPO shares to the simulated market of stock buyers. In real life, investment bankers may guarantee the sale of stock, guarantee the sale and the price of the stock, or not guarantee anything except that they will make their "best effort" to sell as many shares as possible at the best IPO price as possible. In the simulation, the guarantee is that all shares will sell, but the price is on a best efforts basis. As in real life, the price for two firms with everything exactly equal may have a variance in the IPO price. In real life it depends on the investment banker selected, the amount of promotion the banker did prior to the IPO, and the luck of finding the right investors at the right time. You may find a variance in the simulation's IPO of $.50 or more even when two firms look exactly alike (size of issue and amount of debt issued in the same quarter).

The Use of Debt:

Debt is borrowing money with a promise or obligation to repay the value. Generally, the lender will require a fee and/or interest charge for the use of the funds. The lender will also require the firm executives to sign documents, which specify details (rules) including payments and the lender's rights should the firm not follow the rules.

Debt is frowned on in some societies and embraced in others. In the United States many firms and individuals were forced into bankruptcy when the great depression started in 1929. Many of the classic movies have "the evil bank" as the villain coming to take possession of the cattle ranch, the dust bowl farm, or the family business. The financial horror of the depression and other severe recessions make some business owners and some families very shy about taking on large amounts of debt or any debt at all.

Good economic times, especially if fueled by rising prices (inflation), make the smart users of debt far richer than the individuals or businesses that utilize only their own money (equity). If you can personally borrow money at 8% to buy a $200,000 home and prices remain stable, you will, in twenty years or so, own that home. You would, over the twenty years, have earned considerable tax advantages in using debt since interest

from home loans can be deducted from your earnings before your income tax is calculated. You also would have been forced to save over the years by paying off the loan. The house after twenty years is 100% yours. Both you and the bank emerge from the contract as winners. Debt allows you to make larger purchases that could not be made if you used only your own money. As long as you can afford the payment and the asset increases in value, you should have made a good investment using debt to do so.

What happens if prices go up each year for the next twenty years after you purchase the home? In twenty years, the value of the home might well be $500,000. You have used someone else's money to buy an asset (your home) that created wealth for you. Not only will you have paid off the loan after twenty years, you will also have gained the entire increase in value. For a mere 8% annual charge you will have gained $300,000 in profit and $200,000 in forced savings in paying off the loan.

This story has been true for most middle to late age homeowners. The value of a home minus the loan is what is yours. That value, **net** (minus) the loan is called **owner's equity**. Homeowner's equity is one of the major sources of retirement wealth for our aging population.

Sometimes, when the economy is not good and individuals lose their jobs, there are not enough homebuyers for the number of homes on the market. That is, the supply is greater than the demand. Basic economics would suggest that when supply is greater than demand the supply will be reduced and/or the price will be reduced. That is exactly what happens in the housing market. Since supply is somewhat fixed in the short run, house prices could decline sharply due to poor economic conditions. Homebuilders in such an environment will stop building. In the longer run, the supply of homes will stop increasing once builders finish their construction projects. If builders were not alert to the warning signs that the economy was slowing down or entering a recession, they might not be able to sell those homes already built or under construction. In products with a long lead time from start to sale, economic forecasting is essential. Examples of such products are airplanes and real estate developments.

The same problem exists for those individuals who own a home with a large loan. The borrower must sign a paper called a promissory note, when taking out a home loan. The promissory note is the borrower's promise to repay the debt as required. To lower the risk and have extra security the lender will require that the repayment of the promissory note be "guaranteed" by pledging the home as protection. The pledge of the home as security to the promissory note is called a **mortgage.** Should something hinder the homeowner from making payments the result will be that the institution (usually a bank or insurance firm) that lent the money will **foreclose** (repossess) on the home. And what will "repo" man do with the repossessed property? Financial institutions do not want the property back. They want the **principal** (money loaned) plus interest. Taking over property creates a bad public image for the bank. It also creates the problem of what to do with an asset that is, more than likely, going down in value. However, having the house is better than having a loan that produces no return at all.

To Borrow or Not to Borrow, That is the Question

You will be making a decision on how to finance your team's corporation. You have two major sources of funds. You must issue stock to form your corporation and raise the initial funds. The equity funds that come back from the sale of stock are locked permanently into the corporation.

You do have some legal obligations to stockholders but making them money or returning their investment is not included. You simply need to inform them about what the corporation is doing. Stockholders could, if they ever got organized, vote the management team out of office at the annual meeting. However, investors generally do not fight. They complain at the annual meeting and if still unsatisfied simply sell their stock, perhaps at a loss, to another buyer. Equity funds are very risk free from the corporation's point of view.

Thus, financing with stock reduces the firm's financial risk. For firms in high-risk industries, such as bio-technology, financing with stock is the way to go. Firms in risky industries should not take on high business risk and then finance the business with large amounts of debt. High risk debt financing is not recommend for firms with high business risk. Financing must be considered together with the type of industry the firm is operating in.

Your second major choice of funding is debt. Why use debt if it carries all those obligations to make payments? Since stockholders carry the most risk they will want a high **return**. It is not unusual for stockholders in new firms to expect a 20% or more return per year. They may not get 20% the first year but eventually it should work out to be a high return on average over many years in order to compensate them for the high risk they took. Just like our discussion about borrowing to purchase a home, corporations borrow to purchase manufacturing plants and office buildings. The difference between buying a home with debt and debt for corporations is that the corporation is mainly expecting cash revenues to be generated from the asset, not appreciation (increased value) in the asset.

Lenders carry less risk than stockholders because they have a contract stating exactly when interest is due and when the principal must be repaid. Because lenders have less risk, they demand less return than stockholders. For a new firm with promise, experienced management and enough stockholder backing, lenders might provide limited amounts of capital expecting about an 8% to 12% annual return (compared to 20+% for stockholders that purchased a firm's IPO). The U.S. government tax system allows firms to claim interest payments on debt to be a tax-deductible expense. Governments deny the same tax deduction when payments of earnings are made to stockholders in the form of **dividends**.

When considering taxes, after payment of income tax, the stockholder money will still cost about 20%. Assume a corporation pays 42% in combined local, state and federal income taxes. Assume the taxing authority treats interest paid on borrowing as an expense. In this case the debt-holder money cost drops sharply from 12% on an after tax basis. That is, every $1 of interest expense the firm charge's off against their income saves them from paying $.42 in taxes.

$1 income
No debt

Taxes = 42% x $1 profit = $.42

$1 income
$.50 interest expense
Taxes = 42% x $.50 profit = $.21

It is clear that the firm saved $.21 cents in taxes only because it was funded partly by debt. The point that funding with debt produces a tax shield is very important. Debt can shield a firm from paying taxes and thus the real after tax cost of debt is lower than the stated interest charged, depending on the tax rate paid by the firm. Thus, the comparison is not 20+% equity cost compared to 12% debt cost. The 12% needs to be restated to its after tax cost which is 6.96% (1- tax rate x the interest rate OR 1 – 42% x 12%).

The Question

In your firm, would you rather have a stable and conservative source of funding from stock? Or, would you rather mix that funding with some debt?

Using debt will obligate the firm to make payments and thus increase its risk. Mixing 20% money with 7% after-tax debt money lowers the cost of funds (sometimes called the cost-of-capital). Using debt in this way means you need fewer shares of stock and, if you are successful, each share will then have higher earnings per share.

$500,000 income after tax
500,000 shares outstanding
EPS (earnings per share) = $500,000/500,000 shares = $1 EPS

$430,000 (after 12% interest and taxes; financed the firm with half debt, half stock)
300,000 shares outstanding
EPS = $430,000/300,000 shares = $1.43 EPS

EPS is the major driver of share price. Thus the stock in the second example with an EPS of $1.43 will be much higher than the stock in the first example, which had $1 EPS. HOWEVER, if the firm comes on hard times the reverse could be true.

$0 income
500,000 shares outstanding
$0/500,000 = $0 EPS

- $120,000 due to interest expense (tax carry forwards or backwards not considered)
300,000 shares outstanding
-$120,000/300,000 shares = -$.40 EPS

Now the stock market will punish the high-flying stock because of its decline in earnings from $1.43 to -$.40. The more conservatively financed firm (all stock, no debt) will also decline in price since its EPS went from $1 to $0, but its fall will not be as drastic as the firm that financed with debt and equity. This movement in share price in the market place is referred to as the stock's **volatility**.

High-risk production, combined with high-risk markets, combined with high risk financing creates the most volatile stock in the market. An example would be a high volume robotic car manufacturer in the global auto market funded by 60% debt. As long as the car factory was near capacity the cost per car would be low. As long as the style of the car sold well in global markets sales revenues would be very high. Given high revenues and low costs, profits would be very high. Very high profits spread over very few shares make this a fantastic stock. But only in the best of times!

Type of Debt

There are three major types of debt used to finance firms. The first is debt that comes about from engaging in normal business activities. If you hire someone and salaries are paid monthly, then by the time the month is halfway through you have created a debt for the service they provided. If you order merchandise (product) for your store, the seller will send you an invoice and perhaps give you sixty days to pay. You now have a debt but all you signed was the purchase order.

This type of debt, incurred in normal operations of the firm, is lumped together when the books of the corporation are prepared under the title of **Accounts Payable.** Accounts payable represent very short-term debt that is payable in a few days to a few months. Generally accounts payable do not incur interest charges.

The second type of debt is categorized as loans. Most loans are evidenced or formalized by a promissory note. The terms of the note may vary in order to match the needs of the lender and buyer. Terms often involve the following:

- Rate of Interest
- Date(s) the money is available
- Date and amount of payment(s)
- Secured (pledging an asset to guarantee repayment of the loan)
- Penalties for late payment
- Conditions which allow the lender to ask for the loan to be repaid immediately
- Definition of the legal remedy if contract is not honored
- Process for automatic electronic payments.

Loans are generally longer term than debt owed in the accounts payable category. Some loans are set to expire quarterly but can automatically be renewed on permission of the lender. Long-term loans may require monthly, quarterly, semi-annual or annual payments along with interest due.

The third category of debt as defined in this text is bond debt. The bonds are promissory notes and the firm must pay interest and eventually repay the bond principal.

Bonds generally expire (are due to be paid back) in twenty years. Bonds are sold in smaller denominations generally at $1,000 each.

Bonds are sold in small denominations to make them attractive to average investors. This is in contrast to loans, which are very large and made in agreement with large lenders such as banks and insurance companies. Smaller investors however, cannot be expected to negotiate loan terms directly with the firm. Therefore the firm appoints a well-known and respected financial institution to help define the terms of the bond and to act on behalf of the bondholders (the investors) over the life of the bonds. With someone to monitor the firm to protect the terms of the contract, investors feel comfortable buying bonds. If the firm is well known and it appears that it can honor the bond contract the bonds should sell well.

There are some situations where bonds will not find a ready market of eager investors.

- The interest rate was set is too low compared to what is available from other bonds in the market.
- The firm is not well known and the size of the issue is very large.
- The firm has a poor record of earnings or its position in the market is not stable.
- The firm is a new firm with little if any history.
- The firm is attempting to fund its operation with excessive debt in comparison to a small amount of equity.

If the financial advisors misjudge any of the above considerations or if the interest rates in the general market are changing often, then the bond contract may be unacceptable to the bond buyers. If the bond is not attractive to investors not all the bonds will sell and they may sell at a discount.

To attract investors the firm and its financial advisors may keep the terms as stated in the bond contract but lower the price. Since it would take weeks or months to rewrite the contract and promote the sale, the firm will simply lower the price (take a discount) on the $1,000 bonds. A discount in financial terms is the same as a discount in a clothing store sale where an item is reduced in price from its original value. With a **bond discount** the firm will mark the $1,000 face value (original stated value) down to a price that will sell well to investors. The discount means that the firm is still obligated to repay the investor the full $1000 for the bond when it is due for repayment, but the investor may only have to pay $980 to purchase the bond. All other contract terms including interest stay the same. (For information on how a bond discount affects the balance sheet or income statement, refer to the accounting chapter.)

Financial Assessments

Financial assessment measures management's performance against external benchmarks. Analysis of financial performance is usually quantitative and the benchmarks external, thus financial assessment is a rigorous method of measuring management's performance. In this section we examine the variables often used when

measuring financial performance followed by methods to evaluate financial performance. The variables involved in measurement are:

- Time
- Value (always in terms of cash in your hands, not profit)
- Return (sometimes called a rate and expressed as a percent)
- Risk

TIME

The statement "Time is money" is often referenced in the business community. This statement is generally used in discussions concerning the time value of money. Money is a storehouse of value. If you can inherit it, earn it, marry into it, or steal it you can unlock that value so that goods and services are at your command. If you elect to let others use your money by becoming an investor in debt (loaning others money), equity (purchasing stock), or revenue generating assets (such as a purchasing a house to rent out to people) you can increase the value of your money. How much value you can create depends on the return and the length of time the funds are invested.

- Invest $1,000 in a bond that pays 8% interest with the interest reinvested at the end of each year again at 8%. Assume it is through a retirement account so taxes on profits each year are not considered. How much would you have at the end of 1, 5, 10 20 and 40 years? The answers are:

1. 1 year = $ 1,080
2. 5 years = $ 1,469
3. 10 years = $ 2,159
4. 20 years = $ 4,661
5. 40 years = $21,725

In this set of time related investments, it is clear that time is money. How much time do you have until you retire? Maybe you should consider getting started on earning and saving.

Cash-In-Hand

Increasing profits after tax will delight stockholders. However, the stockholder does not get cash from an income statement. Cash for stockholders can only come from two sources:

1. Increased value in the share price (selling stock for more than the stockholder paid for it)
2. Cash dividends paid directly from the firm on each share of stock outstanding.

Thus, while your firm may be doing well as measured by net income after tax and EPS (earnings per share), until the stockholder has cash-in-hand from dividends or can get cash immediately from the sale of stock, the value is elusive.

When firms assess financial performance of a new machine or a new product line, profits are examined. But financial assessment focuses on cash available. As we pointed out in the section on time above, time = money. A decision to choose between two equal investments with the same profits might be by a flip of the coin. But if one machine produced cash flows earlier than the other machine (still with equal profits), it would come out the winner.

Return Expected

Returns are generally not guaranteed. EPS (earnings per share) for any one firm and the stock market in general may be quite volatile. Values of bonds may change dramatically as interest rates change. The point is that returns can vary from the expected. How do you know what the return on any particular investment will be? We recommend you examine as many factors as possible from as many sources as time permits. Then estimate the low, high, and average (or most likely) return from an investment. Use the average estimate for analysis. The range between high and low estimates will help you identify risk levels (discussed next). Returns are sometimes in dollars but most returns are measured by rates, (the percent of return) or by net present value discussed later in this Chapter.

Risk

Risk to a professor of finance is any change from the expected result. Most investors however, view risk as the chance that you will receive less than your expected return. We will use the more common expression of risk in this discussion, that is the chance of receiving less than expected. The greater the range between the expected *low* and *average* return, the greater the risk. Note that we are not talking about why the range exists or why an investment is volatile. We have isolated risk by defining it as the chance of receiving less than the expected for whatever the reasons. Examples for volatility in returns are competition, erratic decision-making, and external forces such as legal constraints imposed by governments.

The most risk free investment is to deposit your funds in a bank savings account, or if one can invest large amounts, then in government T-Bills. The expected return is guaranteed and unless your bank or the United States government fails, the expected return should turn out to be the same as the actual return. If inflation is high (prices moving higher) and you are in a moderate to high tax bracket, it is possible that your profits will not keep pace with the increases in prices. You will have taken a real economic loss even if your income records show a profit. The point is that low risk generally means low returns on average. At some level avoiding risk might become unprofitable.

- Assume a $100 savings account provided a 3% annual return.
- Assume your tax rate on this income is 20%

- Tax on profit is .2 x (100 x .03) = $.60 (or 60 cents)
- Your increase in wealth after tax is $3 - $.6 = $2.40
- If prices increased over the year by 3.2% you lost $3.20 of purchasing power on your original $100. While on paper you are now worth $100 + $2.40 = $102.40 in terms of what you can now buy, your wealth at the end of the year is equal to 102.40 - $3.20 = $99.20.

Given this example, the most risk free investment (little risk because the expected return was guaranteed) turns out to be a loss. Many investors fear risk so much that they put money into savings accounts during periods of high inflation and in the process earn a minimal after-tax return or even a loss.

Financial Assessment Methods

There are several methods for evaluating financial performance. The method of analysis selected depends on the question you are asking. The four basic questions are:

1. How long before I can get my money back?
2. How much value will I have in X periods?
3. How much is the investment presently worth?
4. What return will I make?

- Payback method is used to answer question 1.
- Future value method is used to answer question 2.
- Present value method is used to answer question 3.
- Internal rate of return is used to answer question 4.

All four financial assessment methods use only cash for calculations. An investment that delays cash flow to build up inventory or spare parts for a machine is less desirable than an investment that starts producing cash flows immediately. Even if profits over the longer run are equal between the investments, early cash flows are important --- time = money --- get your cash sooner than later so you can invest in other ventures.

Payback:

Payback is fast, simple, and not very accurate. Only investors that worry a lot about the money they invested use it. Payback does have appeal to our human emotions. No one likes to admit to a financial failure. Therefore, the sooner we can say we got our money back the more our egos are protected. Thus, while the method is not a good method on which to make decisions, many investors still calculate payback to calm their anxiety.

For example:

Firm A was considering the purchase of a bottling machine at a cost of $1,200,000 that would last 10 years. Firm A estimated the following profits and cash flows over the life of the machine:
Year 1 = $150,000 profit with 100,000 being available in cash
Year 2 = $450,000 profit with 200,000 being available in cash
Year 3 = $600,000 profit with 400,000 being available in cash
Year 4 = $600,000 profit with 500,000 being available in cash
Year 5 - 10 = 600,000 profit with 500,000 being available in cash (per year)

By the end of Year 3 profits equaled the $1,200,000 cost of the machine. But only cash counts. Therefore, payback in this example is 4 years found by adding the cash flows from years 1 through 4 to equal $1,200,000. Note that years 5-10 are not even considered in this method of financial analysis.

Future Value; Present Value; Rate of Return

These three methods for financial analysis or assessment all use the same three variables.

Variables

Solve for Present Value **to answer question 3**	***Solve for Rate of Return*** **to answer question 4**	***Solve for Future Value*** **to answer question 2**
Period "0" represents the Value at Present Time	Return or rate per Period - stated in days, months, quarters or years	Value at Future Time
Value at present time = future value / (1 + rate) for each period	Rate of return is found by trial and error keeping future and present values constant.	Value at future time = present value x (1 + rate) for each period.

Examples:

Complete the table below. Assume you put $1 (value) into a special savings account at the beginning of Year 1 that earns 5% (rate) each period (one year in this case). Assume the interest earned on the original value is retained in the account to earn more interest. Years 1 and 3 have been filled in for you to ensure that your calculations are correct.

Future Value

Rate of Return	Present Time is Period 0	Period 1	Period 2	Period 3	Period 4	Period 5
5%	**$1.00**	**1.05**		**1.1576**		**?**

Congratulations, you have just moved money through time (called **compounding**).

Next complete the present value table below. How can you mathematically move money back through time? In the future value example above you moved money forward each period by *multiplying* the value by 1+ the rate: value X (1 + rate). This time, to

move back through time you use this formula *dividing* the value by the rate + 1: value X/ (1 + rate) for each period.

Present Value

Rate of Return **5%**	Present Time	Year 1	Year 2	Year 3	Year 4	**Year 5**
	?					**$1.276**

Congratulations, you have just moved money back through time (called **discounting**).

Next complete the rate of return table below. To solve for the rate of return, one must both the future and present values, but "guess" at a rate and solve the problem. You can elect to move in either direction. That is, use your rate and compound a dollar into the future just like in the future table. If you guessed at the correct rate, the present value compounded over the number of periods will equal the future value. If your answer does not equal the future value, try again using a different rate. You can also elect to start at Year 5 in this example and discount (or move the money back through time) at your guessed rate. If you are correct, your answer will equal the present time value. The future and present values in the table are given. The values may be real numbers or they may be estimated numbers. You cannot change the values. The question that is being asked is, given these two numbers, what is my rate of return?

Rate of Return

Rate of Return **?%**	**Present Time**	Year 1	Year 2	Year 3	Year 4	**Year 5**
	1.00					**$1.276**

There are many complications to the three basic methods demonstrated above. The most common is what happens if I invest a dollar in Period 0 and also invest a dollar in each subsequent Period? Fortunately calculators and computers can handle almost all such variations. What they cannot handle is that you have applied the right method to answer the right question. Let us try several questions to gain some experience in selecting the right method.

1. I need $1,000 in 5 years. How much money do I need to invest today at 5%?
   A. Use the Future Value Method
   B. Use the Present Value Method
   C. Use the Rate of Return Method

Hint: First consider what is known in the problem. You need $1,000 in the future so the future value is a known. You know the rate is 5%. What don't you know?

2. Solve the problem stated in question 1 above.
   A. $1,000

B. $1,050
C. $ 1,276
D. $783

Hint: The present value number will always be smaller than the future value number. Estimating the answer should provide you with the right answer in this problem without doing any calculations. Estimation in financial problems is always beneficial. It insures that you are moving money through time in the right direction. We suggest you proof the answer by actually going through the calculations of moving the $1,000 back through each period to the present time.

Before we proceed to the next questions, review the small section of a future value and a present value table shown. Note that future value table starts with $1 and compounds it into the future (values start a $1 and become larger). The present value table starts with a $1 future value and discounts it back to the present time (values start a $1 and become smaller). Since the tables were constructed using $1, and value can be quickly moved forward or backward in time just by multiplying the dollar amount times the factor from the (correct) table. Examine the tables below. Note that the answer to question 2 above can be solved quickly by using the Present Value table below: see 5%, 5 periods, and the factor value of .7835. If a future value of $1 discounted back 5 years at 5%, is worth $.783.5 then $1,000 discounted back 5 years at 5% is 1,000 X .7835 or $783.50. The tables make it so easy.

PERIOD	FUTURE VALUE		PRESENT VALUE	
N	5% and	10%	5% and	10%
1	1.05	1.10	.9524	.9091
2	1.1025	1.21	.9070	.8116
3	1.1576	1.295	.8638	.7513
4	1.2155	1.4641	.8227	.683
5	1.2763	1.6105	.7835	.6209

3. One share of a popular tech stock is presently trading at $112. The investor expects this stock to have a 10% annual growth rate. How much will it be worth in five years?
   A. $112
   B. $1.6105
   C. $180
   D. $69.54

Hint: First you should estimate the answer. In this problem the investor has a present value and will be moving the value forward through time. Thus the answer must be larger than $112. Estimate how much larger. Moving from today (present value) with $1 compounding at 10% the future value would be 1.6105. That is $1 will have grown to $1.6105. Thus, $112 would have grown to $112 X 1.6105.

4. The investor thinks this tech stock will be worth $200 five years in the future. He/She requires a 10% return for that type of risk. What is the most the investor should pay for the stock today?
    A. $112
    B. $200
    C. $124
    D. $322

Hint: You should have estimated that the number would be considerably less than $200 since you are moving from a future value back to a present value using a fairly high discount rate. $1 future value moved back 5 periods at 10% to the present is worth $.6209. $200 moved back in this problem would be worth $200 X .6209.

5. Problems 3 and 4 both analyzed the purchase of a share of stock for the same hypothetical company. The investor in problem 4 researched the company and made an independent decision about its expected year 5 value. The same investor made an independent decision to discount the stock back through time at 10% instead of 5% to account for the extra risk of being in the stock market. Should the investor in Problem 4 purchase the stock if the current market value is $112?
    A. Yes
    B. No
    C. Not enough information

Hint: If the investor paid $124 (the calculated present value) for the stock, the return would meet the required return of 10%. Since the stock is being sold at $112, the answer is, yes the investor should purchase the stock.

If in problem 5, we net out the $112 cost of the stock from the calculated present value of $124 the result is called NET PRESENT VALUE or NPV. In this case, $124 - $112 = $12 above expectations or $12 above value using the required 10% return. If a NPV value is positive, this means you have exceeded investment expectations.

The Present Value Concept Applied in the Simulation for Assessment Purposes

The same NPV system discussed is used in the simulation to rank your firm's financial performance. Stockholders in the simulation expected a 20% annual return (or 5% per quarter). If your team can make the stock rise by 5% per quarter you will have made the exact return stockholders expected. The calculated present value and your firm's reported market value per share would be exactly equal. When exactly equal, if you subtract the market value from the present value the result will be an NPV of zero

(0). Zero is a great NPV as it means you are giving stockholders just what they expect. A positive NPV is even better. An NPV of $1.25 means the market value of your stock is $1.25 higher than the value expected by the stockholders. An NPV of $-2.22 means the market value of your stock is $2.22 less than the present value expected by your stockholders.

Ranking Example:

Firm Number	NPV
22	2.21
23	1.12
75	.89
112	0
17	-1.62

In this example of ranking simulation performance, firms 22, 23, and 75 all performed above stockholder expectations by the end of the quarter reported. Firm 112 is exactly meeting stockholder expectations. Firm 17 is not doing well in the ranking. Firm 17 might be making profits and its stock might be moving up very slowly, but its share price at this point in time is $1.62 under what stockholders expected.

NPV is a highly respected method of ranking investments, or in the simulation, ranking firm performance. The PV (Present Value) and NPV concepts are difficult to master and generally introduced to students in their junior (3^{rd}) year of a business program. If you have understood the concept even if you cannot do the problems you still have gained valuable insights into how business people make decisions.

We present a Future Value method next for analyzing your firm's performance. Future Value is easier to understand since you have more experience thinking about moving money forward rather than backwards. You and your team members should fill in the chart below and compare answers. Calculating expected market prices for future quarters will be of great help in understanding what stockholders expect of you and your team partners.

The Future Value Concept Applied in the Simulation for Assessment Purposes

Variables:

A. IPO price of your stock: _____?

Required rate of return by investors is 20% annual. Since the simulation works with quarters of a year we will use 1/4 of 20% or 5% per period. You can calculate what the value of your stock should be by the end of any quarter by multiplying your stocks IPO price by the quarterly factors (factors are from a future value table using 5% per period).

Quarter	0	1	2	3	4	5	6	7	8
Factor	1.0	1.05	1.103	1.158	1.216	1.276	1.34	1.407	1.478
Expected Market Price = $IPO x factor									

IMPORTANT STRATEGY: You can reduce the size of your stockholder's expected market price and perhaps increase your firm's rank. To employ this strategy, get some cash into the stockholder's hands by paying a dividend. Dividends are a cash payment direct to the stockholder and help satisfy their desire for a 20% annual return. Paying dividends earlier rather than later are more valuable to the stockholder.

WARNING: Your firm must have positive retained earnings as shown on the balance sheet in order to pay dividends. Paying out earnings (dividends) without having earned anything as shown in the retained earnings account, is unethical, perhaps fraudulent and your firm is subject to severe government fines.

NOTE: There will be a difference in the calculation in the simulation program versus your own calculation whether you use the NPV method or the Future Value method. The simulation uses 1/4 of the last four stock prices to determine PV. This is done to make sure that a poorly managed firm with some great luck in the 8th quarter does not win the game by chance. It also means that a great firm that did well in 7 quarters but makes a serious data entry error in Q8 does not end up on the bottom of the rankings. If your stock is volatile and changing radically over the quarters the computer's ranking will be very different than yours. If your stock is fairly stable, the two measures should be closer together.

A $4 IPO stock is not better or worse than a $2 IPO stock. What makes all the difference in the simulation and in the real stock market is how much value is being added to the starting IPO stock value. So don't worry much about your IPO price. Direct your concerns towards managing your firm to make profits that will push the IPO price higher and higher over the quarters.

We offer a very short case aimed at your personal life long consumption patterns. If you were to purchase a home using credit it is likely to be a smart move because your equity in the home will more than likely have a more rapid increase in value than what you pay in interest charges.

Do credit cards work the same way? No, because credit card expenditures are not used to purchase assets that increase in value. Credit is supplied to enjoy the consumption of material things (meals, trips, etc.) before you can afford to buy them with cash. Calculate your cost to enjoy early consumption over the next thirty years.

1. What is your expected credit card balance per year over the next thirty years = $_____? (A common amount would be $3,000)
2. What is the rate you expect?_____ (A common amount is 20%)
3. Calculate cash paid each year to credit card companies (balance X rate) = $_____.
4. Cash paid out over 30 years = $_____? (This is consumption that you could have had but that some stockholder at the credit card company is going to enjoy instead.
5. Value of the same cash put into a tax free retirement account each year that is invested in a moderate stock portfolio = your annual interest charge from 3

above _____ X 199.02 = $_____. This is the dollar amount you could easily have had to consume anything you wanted to 30 years from today. Consume today using credit or discipline myself and consume away 30 years from now? The 199.02 factor is from a future value table using 30 years and 11%. The 11% figure is a safe estimated average market return when taken over a long period of time.

Sample outcome: $3,000 x 20% = $600.
30 years: $600 X 199.02 = $119,412.
40 years: $600 X 581.83 = $349,098

Understanding the concept of time value of money can be a personally rewarding learning experience.

Key Words:

- Bond Discount
- Compounding
- Debt
- Discounting
- Dividends
- Foreclose
- High-Risk Debt
- Investment Banker
- IPO (Initial Public Offering)
- Mortgage
- Owner's Equity
- Principal
- Return
- Volatility

Appendix C:

The Second Trial Decision

Appendix C will help you apply the concepts learned in Chapter 7 and prepare your team for entering decisions for your second trial decision. Having experimented with the marketing variables, your team should reexamine its marketing strategy and fine-tune the marketing decisions. If the first trial decision brought disastrous results, perhaps the firm should analyze the marketing strategy and decide whether or not to rewrite the vision statement, the marketing plan, or both. Refer back to Appendix A if your team has questions about marketing decisions, or Appendix G for specific instructions on entering decisions.

You will need to work with your team to design financial strategies that integrate seamlessly with the firm's marketing strategies. Both the marketing and financial strategies must integrate and support the agreed upon management objectives and strategies which support the firm's vision statement (see the Chapter 3 on "Management").

By now your firm should have a good idea of the products your firm will be distributing in the simulation. The stability or continual ease of being able to sell the firm's product will dictate, to some extent, how much debt a firm can tolerate. The more seasonal, the more untested the product, the more inexperienced the management, and the more competitive the industry the less debt a firm should carry. In the simulation, you have three choices of debt explained below.

1. **Short-term loans:** the interest rate is unique for each firm. See your rate, which can be found, at the top of your last Firm Report. We recommend only a small amount of debt to test the results. A short-term loan is a good source when you need the funds only for a short period of time. Otherwise there are less expensive sources of debt.

2. **Long-term loan (or "term loan"):** the interest rate is general for all firms. The interest rate for a long-term loan is lower than the rate for short-term loans. Once a long-term loan is taken out, however, the funds must be kept for at least one year. The rate in the simulation is variable. That is, it changes over time. In this simulation, the banks have the right to change the rate once a year. If they do change it you can then pay it off or keep it for one additional year at the new rate.

3. **Bonds:** has a very low interest rate. The firm is obligated to make interest payments each quarter (every 3 months) and also to pay off the bond discount. Repayment of the bonds is not made for 5 years (20 quarters) unless your firm enters a decision to reduce the amount of outstanding bonds. Since money is made available by lenders for the long run, they are cautious about lending, and will only lend to high quality

firms. In the simulation bond lenders look to see how much money the stockholders have put in through stock purchases and kept in the firm through retained earnings. As your firm is entering startup decisions, your firm will not have a history of retained earnings. As long as your firm's total debt does not exceed the total stockholder's equity, simulated bondholders will purchase your bonds. After a 1/1 debt to equity ratio is reached, investors may still purchase bonds, but it will most likely be at a highly discounted price.

A conservative firm will issue little if any debt. When all debt is added up (total liabilities) and divided by total equity, the more moderate risk firms will be approaching a 1/1 debt/equity ratio. The high-risk firms, especially if their products, industry, and economic environment are also high risk, will push the debt-to-equity ratio to the maximum. That is, they will have only the minimum shares of stock issued (which in this simulation is 300,000 shares) and they will have borrowed as much money as possible from any source. This is the greatest risk. They must be able to sell their product, capture large market shares against competitors, have enough cash to cover all interest payments, and must not make administrative errors. If they do all of the above, they will have the highest stock price of all firms.

Before you rush into such a high-risk venture recall that additional risk increases the expected chance of failure. If your instructor is measuring your performance the same way as the stockholders in the simulation, then this extreme risk should produce either an "A" grade or an "F" grade.

Whether or not your firm elects to use debt, all firms must issue a minimum amount of 300,000shares of stock. Remember to examine Appendix G for specific instructions related to entering decisions into the simulation. When results are available on Monday, you will get a report back showing the results of your financial decisions and how the accountant received the money and set up the corporate books.

How much can you expect per share of stock issued? About $2.25 per share for 2,000,000 shares and $3.80-$4.00 per share for 300,000 shares issued. The more shares issued, the less potential earnings per share and thus less value seen by the stockholder. The amount per share also depends on the state of the general economy. Therefore, practice and gain some information on the condition of the economy in which you will be starting your firm.

Practice Decision Forms

Marketing Decision Form

Advertising:

	Area 1	Area 2
Product 1	_____	_____
Product 2	_____	_____

Prices:

	Area 1	Area 2
Product 1	_____	_____
Product 2	_____	_____

Sales Reps:

Area 1	Area 2
_____	_____

Trainees: _____

Change in Sales Rep Salaries:

Area 1	Area 2
_____	_____

Change in Sales Rep Commissions:

	Area 1	Area 2
Product 1	_____	_____
Product 2	_____	_____

Credit Policy:

0 1 2 3 4 5

Budget Decision Form

Quality Control

Quality Control Budget_____
Percentage of Budget to be spent on Product 2 _____%

Financial Decision Form

Short Term Loan:_____

Change in Term Loan:_____

Issue or Repurchase Bonds

Issue Bonds _____

Issue or Repurchase Common Stock

Number of Shares to be Issued _____

Appendix D:

The Scent Industry

This appendix will detail the specifics of the Scent Industry. The numbers presented here are crucial to the operations of your firm. You will find market information for the NAFTA and the EU markets, the seasonal sales patterns for both Product 1 and Product 2, the patterns for product backorders, and other industry specific information such as shipping and storage costs.

In the scent industry, Product 1, or P1 is a men's aftershave (cologne). Product 2, or P2 is a ladies perfume. Following are market research reports for each of these two products. Product is sold by the case. A case is considered 1 unit.

In both markets (Area 1 and Area 2), simulated retail buyers are used to get the product into retail outlets. The starting retail demand, as predetermined by the simulation administrators, is influenced by factors within each separate market group, such as: total of all firms regarding advertising expenditures, number of sales reps working the territory, average product price, sales rep compensation, quality of the products offered on average and several more minor variables.

Participants attempting long run forecasting at the beginning of the game are often shocked by the variance in actual demand compared to that estimated in the market research report. The assumed set of industry characteristics might not be what actually develops. Thus, one scent market group can create a demand for units far in excess of another, despite game administrators starting them with exactly the same parameters. Low average price in one market group, for example, may skyrocket the number of units sold as compared to a market group that has a high average price.

It is helpful to remain flexible with forecasting early in the simulation, as it will take your firm time to determine how demand in your market group is developing. You should use the market research reports only as a guide, not as a final and absolute rule. Also, keep in mind that the starting demand may not be filled immediately. It often takes three quarters for advertising and quality factors to reach their full impact. Thus, what looks like rapid, industry wide growth in the early quarters may be the cumulative effect of advertising and quality control expenditures.

Market Research on Men's Aftershave

Demand and Price Elasticity

Research has indicated a large and untapped market for quality aftershaves. Currently, professional store buyers must turn to expensive, well-defined global brands or

less desirable imports. An opportunity exists for a group of firms to position themselves between the expensive, globally recognized aftershaves and the nameless product supplied by importers.

The aftershave market in both the NAFTA and EU markets, has a per case price expectation of $100. A case is considered one unit in the simulation. As long as the pricing, on average, stays within the $100 to $150 price range, demand is expected to be substantial and stable.

As the market group average price pushes over $150 per case, men start to conserve on the amount of aftershave applied. The market decreases as price increases. However, there is still a fair sized retail demand for quality aftershave over the $200 per unit wholesale figure. It is doubtful, however, that there is room for more than a couple of firms in that niche.

If the price moves into the $80 to $95 range, consumption is forecasted to pick up sharply. The cause of the increased consumption in the low price range is not fully understood. Research is inconclusive but the following additional uses have been noted:

1. Increased quantity applied to the face as price decreases
2. Used on other body parts as the price decreases
3. In the very low price ranges, aftershave is used as a deodorizer in shoes, under arms, and splashed into air conditioning vents
4. At the extreme low end of the price range, the quantity sharply increases but the use has not been determined.

The pricing structure is thus very important in developing and implementing strategy. There is ample room for firms in both the NAFTA and EU markets. There might not be room in the high-end niche or low-end volume markets if three or four firms follow the same strategy in those markets. There is no reason seen why one firm could not successfully employ a low-end volume strategy (say in the $90 range) while another firm successfully niched the high end (say in the $200 range). Both firms and those in between the two extremes would have to construct the appropriate marketing program to maintain their market shares.

The market in the NAFTA area is thought to be in the range of 100,000 to 150,000 cases annually. In the EU it is assumed to be about 20% less. Be aware that average price, sales rep energy expended, number of sales reps working within the market group, average product quality and advertising quality can radically influence the number of aftershave cases demanded.

The initial grab-for-market should be easy with no resistance. After the 100,000 case range is achieved, growth will continue at an estimated rate of 5% (all other things - such as average price - remaining stable).

Seasonal Demand:

There is a sharp seasonal demand for men's aftershave. Quarter 1 (January, February and March) demand is very low. Most stores are living off stock left over from the Christmas holidays. Quarter 2 demand is double that of Q1. Quarter 3 is slow and equal to Q1. Quarter 4 is gigantic, at least four times Q3.

Example of seasonal demand pattern for Product 1 as a percentage of annual sales:

Quarter 1 = 12.5%

Quarter 2 = 25%
Quarter 3 = 12.5%
Quarter 4 = 50%

Backorder Rate:

Firms have a high backorder rate for men's aftershave in Q1, Q2 and Q3. About 75% of orders not filled in these 3 quarters will be kept and filled in the following quarter, while 25% will be sales lost. In Q4, however, if a firm cannot ship enough product to cover sales, they will lose the sale and possibly the client. In Q4 only 1% of orders not filled will be backordered, 99% of orders not filled will be sales lost.

Firms participating in the aftershave market, as you can see, are presented with an interesting challenge. The high demand in Quarter 4 creates a major demand/supply problem that can only be solved through careful strategy design and implementation. That strategy needs to be designed by and coordinated with production, financing and marketing executives.

Market Research on Ladies' Perfume

Demand and Price Elasticity:

The EU and NAFTA appear ready for new entrants to the ladies' perfume market. Professional store buyers have been looking for quality products at a price that would undercut the world famous name brands. The product must be supported through advertising and a sales force (something the imports have not done).

A market group average price for a case (considered 1 unit in the simulation) in the range of $140 to $185 would seem ideal. There is a demand for product above the $300 case price and below the $125 price. Individual firms should set their own strategies accordingly.

For individual firms, higher prices mean less demand in a linear relationship. However, it appears that for the market group as a whole, if the average price rises too high, demand will fall at an increasing rate (non-linear). This indicates a market wide price barrier at the upper end. The reason for the barrier is that consumers will switch over to world famous brands as the price differential narrows. If the average market group price is too low, consumers will attach the import image to the product in that market group and buy the imports instead. Thus, in this unique situation, firms should compete on price as normal. However, as a market group, there is some concern that everyone will suffer if the average price moves out of its optimum range.

Initial demand for ladies' perfume is large - maybe gigantic! Response from buyers would indicate a demand on the low side of 100,000 cases (units) annually for the EU and 100,000 cases (units) annually for the NAFTA market; up to a high side of 250,000 units for the EU market and 250,000 units for the NAFTA market. Initial surveys have indicated a serious problem exists in maintaining a market over time in the 150,000 to 250,000 unit range. The reason is that men purchase most of the ladies' perfume. When faced with a choice between expressing some degree of affection, most men will tend to buy on the safe and more expensive name brand side. A sizeable percentage of this new industry's consumers are very familiar with world famous, name

brand scents and can be expected to gravitate back to buying those world famous brands. Some will return to the lower priced imports.

The amount of leakage back to world-class brands is dependent, in large part, on the reception women give to the men's original purchase of a new and less expensive brand. Even though the brand is just as good in a quality sense, it must carry an image that is acceptable. If not acceptable, the male is less likely to purchase perfume on the basis of price anytime soon.

How the communication of acceptance or rejection about the gift takes place between the female recipient and the male buyer is not well understood. While males do make most of the perfume purchases, it seems that women, in some fashion, exert influence on those purchases. Some of this influence is assumed to take place prior to the purchase and some of it after the purchase -- so as not to have a bad decision repeated. This entire process takes place over time and is a most difficult area of market research.

With that said, we return to the topic of sales leaking back to name brands. Research to-date indicates that the leakage can be stemmed, in part, by aggressive marketing. Most firms in the market group must be aggressive in all aspects of marketing, but particularly in advertising, in order to hold retail sales to the initial level. One firm alone cannot expend the resources required to maintain the initial demand. Several firms riding the advertising coattails of other firms could cause a sizeable loss of sales to the name brands. In the worst case as much as 40% of the original demand might revert back to imports or name brands. The leakage would start to occur immediately but a sharp noticeable impact would start sometime late in year 2 and continue into year 3. By the end of year 3, in the worst case, demand could slide to 90,000 cases in either area.

Seasonal Demand:

Seasonal patterns do exist. Stores place orders and sell large quantities in January, February and March (Q1). Quarter 1 is about 30% of annual sales. The winter quarter, Q4, is also large. Quarter 4 is about 40% of annual sales. Q2 and Q3 each have about 15% of annual sales.

Example of seasonal demand pattern for Product 2 as a percentage of annual sales:

Quarter 1 = 30%
Quarter 2 = 15%
Quarter 3 = 15%
Quarter 4 = 40%

Backorder Rate:

Stores have historically been agreeable to backorders in the following pattern:

Q1 = 5%
Q2 = 75%
Q3 = 75%
Q4 = 20%

The balance of the unfilled orders, or sales lost, goes direct to competitors or imports each quarter.

Inventory Carrying Costs

The firm's warehouses will have ample receiving and storage space. It will also have a shipping dock capable of inventorying large amounts of finished goods. The charges to the firm, should finished goods storage be used, is as follows:

- Finished Goods, Product 1 costs **$.60** per unit per quarter to store.
- Finished Goods, Product 2 costs **$.90** per unit per quarter to store.

Shipping Costs

Shipping of the finished goods within the firm's market area is FOB. Thus, the firm has no shipping charge. To ship the product overseas between NAFTA and the EU, however, will cost your firm.

- Product 1 shipping = **$2.25** per unit. Minimum shipment is 1000 units.
- Product 2 shipping = **$6.25** per unit. Minimum shipment is 1000 units.

Air shipment (or just in time shipping) on a guaranteed, sale only basis is always **30% higher** than regular shipping costs.

Returned Products

The cost to retrieve, credit the client's account and replace or salvage a returned unit is 30% of that unit's sales price.

Appendix E:

Forecasting Demand

Forecasting demand is essential in order to plan product purchases to cover the needs of clients, avoid special loans, and so forth. Accurate forecasting allows for the resources of the firm to be secured in advance at minimum cost. This chapter will help you develop a good forecasting model.

Accurate forecasting is difficult to achieve, especially when you consider that each market group will develop a unique set of characteristics. The market demand may fluctuate each quarter depending on the political and economic scenarios playing out in *Dollars and Scents Quarterly*. This requires that teams stay alert to market changes and determine the variables that most influence the changes in demand. This chapter will also explain the effects of contract sales and seasonal demand on forecasting as well as product loyalty.

Market Potential

Market potential is set such that an average market group price will create a demand for "X" number of finished good units. The potential is quite large at the beginning, allowing all the new firms easy access to the markets. Most firms find it relatively simple to initially make sales. Under normal circumstances, the industry "matures" early in the second year. After that, growth continues or slows depending on the political and economic events depicted in *Dollars and Scents Quarterly*.

It is important in the early quarters, that forecasters do not assume rapidly increasing sales are a function of a strong growth element in the industry. Most of the sharp increases in sales are due to supply growing, not new demand.

Within this simulation model, market potential is not a set number installed by administrators, it is a base number. The base number is affected, as consumers would be, by a host of market group inputs. The administrators use exactly the same base numbers and defined consumer characteristics in each of the market groups. However, as the individual firms make decisions, their combined numbers affect the market potential.

Thus, two market groups, exactly the same, but with two very different average market group prices, would have two very different levels of demand. This difference in the total number of units demanded is due to the participant's decisions, not the administrator's design.

Not only does price elasticity play a major role in deciding which firm gets the sale, it determines, using the average market group price, how many sales there will be across the entire market group. The market group demand is also influenced by the motivation and number of sales representatives promoting product for firms in a given market group. The market group standard of quality is a factor, as is the number of firms conducting business in the market group. Another major influence is the total amount of advertising dollars being spent currently and in recent quarters.

Other macroeconomic forces are at work on the market potential. Key among these is the bill rate, which in part, is the measure of the money supply and economic activity. The Bear/Bull market also has a modest impact on the market potential.

If it sounds complex, it is. But not so complex that forecasting should be abandoned. You will find sufficient information in the Market Research Reports to allow you a reasonable start at forecasting. Keep good records and analyze the general trend of the market group as well as your firm. We recommend you monitor other market groups that start in an identical position as yours. Those market groups might provide some insight into pricing policy or advertising practices and their effect on market growth.

It often happens that identical market groups develop very different production and marketing structures. All firms might be very successful in one market group but only moderately successful in another. For example, in a recent simulation, one market group had five out of five firms attempting to niche the market. Even after year two, they all continued on with the same strategy. The average market group price was high, the firms were small with few sales reps and little advertising (but high average quality). In year three they raised the average price so high, each trying to be the high price leader, that for Product 2, there were no sales. Consumers went to high quality world famous brands outside the scope of the simulation, opted not to buy anything, or went to cheaper imports.

In another market group, which started exactly the same, business was booming. This group had large firms with high volume firms in the middle price range and a couple of market nichers. Given the large number of sales reps, large advertising budgets and lower average market group price, everyone was profitable. The market group had matured and stabilized.

Seasonal Patterns

The Scent Industry Chapter provided you with specific data related to the quarterly seasonal pattern for each product. Seasonal fluctuations are very sharp from quarter to quarter. To calculate an accurate shift in demand, the seasonal demand patterns of the coming quarter must be adjusted using the previous quarter's pattern.

Using Product 1 in Quarter 3 as an example, it is obvious that the shift in demand from quarter 3 to quarter 4 is quite large. But, using Quarter 4 data by itself does not accurately show a picture of demand. It is important that the forecaster examine the *change* from quarter 3 to quarter 4.

For example:
Q3 Product 1 demand = 12.5%
Q4 Product 1 demand = 50%

Dividing the Quarter 4 demand pattern by the previous Quarter 3 demand pattern, it is obvious to see how the change in demand will affect overall demand for Product 1:

50% (Q4 demand) **/ 12.5%** (Q3 demand) **= 4** (the rate at which sales volume will increase)

The rate at which sales volume will change does nothing by itself, but multiplied by the total number of units of Product 1 sold in an area in the previous quarter, one will

get a rough estimate in the number of Product 1 units to be sold in a given area in the coming quarter.

For example:

Quarter 3 total Product 1 units sold in Area 1 = 5000

Given the rate of change from quarter 3 to quarter 4, one can calculate the expected number of A1P1 units to be sold in Quarter 4:

5000 (total number of A1P1 units sold in Q3) **x 4** (rate of change in seasonal demand) = **20,000** total number of A1P1 units expected to be sold in Quarter 4

What if our example had been forecasting for Quarter 1 instead of Quarter 4? Again using seasonal demand patterns for Product 1, follow the example:

12.5% (Quarter 1 Product 1 demand) **/ 50%** (Quarter 4 Product 1 demand) **= .25** (rate of change in seasonal demand)

.25 (rate of change in seasonal demand) **x 5,000** (total A1P1 units sold in Quarter 4) = **1,250** total number of A1P2 units expected to be sold in Quarter 1

These seasonal fluctuations will affect demand forecasting from quarter to quarter. It is essential that seasonal adjustments be made in order to achieve accurate forecasts. There are however, other factors that must be considered when forecasting, beyond the quarterly demand fluctuations.

Forecasting Demand

Accurate forecasting is a difficult task. When you forecast you are examining a range of possible outcomes, rather than a single finite number. The future is uncertain. How do you feel about market growth, the competition, and other uncontrollable factors? Would you consider your firm conservative or aggressive?

The following model can be used to forecast unit demand for your firm. Be aware however, as you work with the model that it is just that, a model. No one can provide an exact calculation for predicting the future. Learn your environment, the markets, the competition, your own team's capabilities; and your forecasting will grow more precise.

To show you the possible range in forecasting, the formula is applied to a conservative and an aggressive estimate (actual would probably fall in the middle of these two extremes).

Forecasting Model

1. Determine overall market demand.
2. Determine your real market share
3. Multiply real market share times forecasted market demand

Determining Market Demand

In order to begin, you must calculate from your own firm's numbers and those given on the Industry Report, demand for the entire market group. Once you have an accurate picture of overall demand, you can then work backwards to determine what share of that potential market you actually captured.

Following are the variables that you must use to calculate overall demand within your market group.

Market Group Demand Variables		
	Conservative	**Aggressive**
Unit Sales	Add (+)	Add (+)
Backorders This Qtr	Do not use	Add (+)
Backorders From Last Qtr	Subtract (-)	Do not use
Market Share	Use	Use
Market Group Ending Sales Lost	Add (+)	Add (+)
Market Group Contract Sales	Subtract (-)	Subtract (-)
Seasonal Rate of Change	Use	Use

Note that the only difference between the conservative forecast and the aggressive forecast is the treatment of backorders. The aggressive forecaster assumes that all firms had similar backorders this quarter, and that no competing firms had backorders in the previous quarter.

Also note that the Ending Sales Lost figure and the Contract Sales figure are for the entire market group, not just for your individual firm.

Now, assume the firm in question had 5000 unit sales of Product 1 in Area 1 and 1000 backorders of Product 1 in Area 1 for Quarter 1. In Quarter 4 of the previous year they had 2000 backorders. Their market share for Product 1 in Area 1 was 10%. Ending Sales Lost for the market group was 500 P1A1. Contract sales within the market group for Product 1 in Area 1 was 4000 units. The seasonal rate of change for Quarter 2 forecasting is 25/12.5 .

The firm must apply the variables as indicated in the table in order to determine total market group demand.

Conservative Calculation

Step1

5000 sales - 2000 B.O. last qtr/ .10 = 30000 units

Step 2

30000 units + 500 Ending Sales Lost - 4000 market group contract sales = 26500

Step 3
26500 units x (25 /12.5 seasonal rate of change) = 53000
Total = **53000** forecasted Quarter 2 demand for the entire market group

Aggressive Calculation

Step1
5000 units + 1000 B.O. this qtr / .10 = 60000
Step 2
60000 units + 500 Ending Sales Lost -4000 market group contract sales = 56500
Step 3
56500 units x (25/12.5 seasonal rate of change) = 113000
Total = **113000** forecasted Quarter 2 demand for the entire market group

Determining Real Market Share

In the example above, the market group had contract sales. It is doubtful that your market group will often have contract sales (listed on the market group report as wholesale sales). If you don't see wholesale sales listed on your market group reports, you can skip this step and move on to the final forecasting figure.

If your firm or your market group had wholesale sales, your firm's market share may be over or understated on your firm reports. Therefore, your firm will need to calculate your firm's market share of the non-contract sales. Now that you know what the non-wholesale market group sales were in Quarter 1, you can determine your firm's adjusted market share. Continue with the previous example.

First calculate the firm's adjusted units sold. To do this, subtract the contract sales for the firm and last quarter's backorders for the firm from the unit sales figure.

Next, divide the adjusted units sold by the market group demand figure calculated previously. Note: do not use the forecasted number for Quarter 2, but the demand figure for the current quarter (before the seasonal rate of change was applied).

Assume the firm in our example sold 1200 units of P1A1 through contracts.

Conservative Calculation

Step 1.
5000 units - 1200 contract sales - 2000 B.O. last qtr = 2800 adjusted unit sales
Step 2.
2800/26500 = 10.6% adjusted market share

Aggressive Calculation

Step 1.
Same as above = 2800 adjusted unit sales
Step 2.
2800/56500 = 5% adjusted market share

Final Forecasting Figure

Now you have an accurate figure for market group demand and an accurate number for market share. The last calculation is very simple. Multiply the forecasted market demand figure by the adjusted market share figure.

Conservative Calculation

53000 units x 10.6% = 5618 forecasted unit demand for Q2

Aggressive Calculation

113000 units x 5% = 5650 forecasted unit demand for Q2

In conclusion, the aggressive forecaster has arrived at a forecasted unit demand for the coming quarter that is slightly higher than the conservative forecaster. He/she has predicted a larger market and has thus adjusted the firm's market share accordingly. The outlook of the aggressive forecaster is, "We don't have as strong a hold in the market as suggested on our Firm Report. We need to get more aggressive if we want to bring market share up."
It is important to use the same method to determine fluctuations in market share. While the number might not be exact, as long as you are consistent in your calculation process, changes in market share will be useful marketing information on which to base decisions.

Product Loyalty

If a firm cannot fill orders, this generates backorders and sales lost. The program makes two attempts to locate one of your competitors with finished goods available in that market area. If the program, which is simulating a professional buyer, fails to completely or partially cover sales lost, the order goes to importers. If you are that fortunate firm with finished goods left over after satisfying your clients, (even if you have a poor marketing package) you will have great sales and a good market share. That is, until the firms spending all the money on marketing actually fine tune their forecasting method. If a firm successful in marketing but weak in forecasting suddenly figures out how to forecast more accurately, it can have a devastating impact on the market share of a firm living on another's lost sales. In some cases, market shares can decline by as much 50% to 75%, or more if the successful marketer initiates a new promotional package at the same time they purchase enough product to cover demand.

How can you tell if you are at risk in such a situation? It is very difficult to do so. However, there is one case where a firm can get a strong indication that the lost sales of competitors are part of their market share. If a firm has no backorders, no sales lost and no finished goods inventory, they either hit a one in a million chance of making exactly the amount that was demanded, or professional buyers wanted the other firm's products but had to settle for yours instead because the other firm stocked out. If this happens to your firm, there is some lurking danger to your market share.

Loyalty is something that is built up over time. You are a new firm in a new sector of the market. By the end of year two, some firms will have built some loyalty into their product lines. However, you are not selling to end consumers, but to professional buyers that have an eye on profit margins versus consumer demand. Don't count on product loyalty to defend your firm from an aggressive competitor. Loyalty will help delay the onslaught of a ruthless competitor, but eventually, rational professional buyers will add the competitor's lines.

A carefully implemented and very aggressive non-price marketing attack may be hidden from your view by the competing firm's inability to fill demand. When forecasting finally meets their newly created demand, your market share(s) could drop like a rock. The competitor may have been waging war for three quarters and you were not aware of it. They may have built up a huge following based on advertising, quality product image and aggressive marketing reps. In this case, your market shares could slip from 35% say to 5% in one quarter.

They caught you napping! What can you do? The normal reaction is to cut price. That will help, but little market share will shift your way since the competitor now has loyal clients. Price is also a very easy item to spot. Be careful unless your firm has some cost advantage over the competitor. An attempt to match your competitor in non-price promotional activities could take three or four quarters. The program simulates professional buyers and end consumers with advertising and quality memories. An exact budget match on those variables will be an exact match only after three or four quarters. Consider matching per unit, not total budget unless both competitors are about the same size.

Your firm could attempt to saturate the market with advertising and quality imaging. That is, do in one quarter what your competitor did in three. This will take a lot of cash and cut profit margins. Maybe you can catch your competitor napping!

Remember that it is not the total amount of monies thrust into marketing that counts, but rather understanding the variables and designing the right promotional mix. If your mix is wrong, it may take three or four times the total budget of the competitor just to stay even. For a dollar spent on marketing, what got you the most sales for a particular product in the past? Was it price, quality, reps on commission, base salary, no sales lost, credit policy, advertising, stability in pricing, quality and service? Is the mix different for P1 and P2?

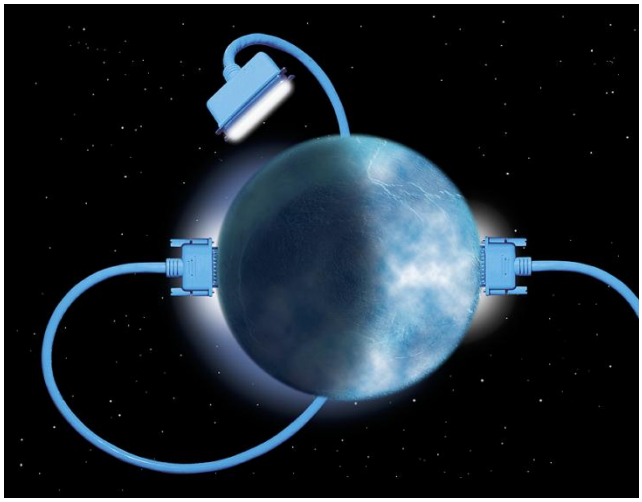
In this regard, realize that consumer sales fluctuate with interest rates, average market group prices and other variables. The right marketing mix will not change dramatically over the course of the simulation, but it could exhibit some change over time due to changes in the economy.

Be aware that it is not just you and your competitor(s) slugging it out. Since you are selling through distribution channels, even a modest change in consumer buying can have a major impact on manufactures. This magnification of consumer buying behavior is due to inventory patterns of wholesalers, distributors and retailers. If they all decide to cut inventories because they think consumer spending will be down, demand can nose dive at the manufacturing level. Conversely, if demand suddenly skyrockets, supply could falter and some distributors would be left without enough product to cover demand from retailers.

Firms engaged in forecasting must keep current as to changes and moods in the economy through reading the quarterly news. In past simulations (not all of them), news reports predicted changes in the way consumers reacted to a product. Mounting public opinion that a particular product was unsafe just about shut one market down. A forecast model should be used for forecasting, but the results tempered by common sense. If your forecaster does not have common sense, then stick to the model's forecast but carry a sizeable financial cushion!

Chapter 8

Management Information Systems (MIS)



Never before has so much information been available to so many people. Businesses can source information easily and rapidly. How can a firm retrieve all the information they need without getting an information overload? How can firms better organize their businesses using modern technology?

MANAGEMENT INFORMATION SYSTEMS

Management information systems (MIS) utilize information technology to make people more effective in their work. The needs of business in this regard are fairly complex. We have noted in a previous chapter that more firms are utilizing teams of people to efficiently complete their work and to better solve problems. Also, we noted that individuals and teams are now more often in direct contact with suppliers and customers. In many firms, people, teams, suppliers and customers are geographically spread out. For national and global firms, offices, warehouses and production facilities are in different sites and even in different countries. Monitoring the organization through the information data generated is difficult to do under these circumstances. Poor information will usually produce poor results at the consumer end, the supplier end and in the corporation itself. In this global and highly competitive environment, firms cannot survive long if they make poor decisions. Businesses are turning to new information technologies to improve the processing, the quality and the speed of information systems.

Typical MIS Needs:

- I need a system that will allow members of a team within the same building to be able to send messages electronically to each other. They must also be able to access the same set of corporate data. They *must not* be able to access personnel data nor data that management has determined to be *confidential*. We need to have a security system that will allow files to be accessed by designated employees only.

- I need a system that will allow our employees that are in direct contact with a client, to electronically pull up that client's record of purchases and payments. They *must not* be able to alter the record. They must be able to write notes on a specific area of the account. When a note is written, it should automatically be sent to our Customer Relations staff so the problem can be resolved. No one involved in this process is allowed to see the clients credit report nor personal data collected from the client.

- I need a system that will allow supervisors at all locations to report electronically when an employee fails to report to work or reports late to work. Supervisors must only be able to write to that employee's file, they must not be allowed to read the personnel file of that employee.

- We need a system that will allow purchasing to automatically mail out invitations to suppliers so they can bid on an order of merchandise we wish to purchase. The purchasing agents of our firm must not be able to enter vendor names and addresses. We need to have vendors reviewed by a top level officer and on satisfactory completion of that review, have that officer enter the vendor name and address.

The list of what firms would like their management information systems to do seems to be endless in this information age. There are two major forces at work in most

firms as they attempt to satisfy the firm's need for information systems. Teams, departments, and corporate divisions which have some budget control, will each go out and buy individual fax, phone and computer systems that solve immediate problems. The individual or team purchasing the equipment might seek the advice of the vendors of such equipment and the advice of technical staff within their firm.

Another force at work in firms is a group, usually at or near the top level of management that will review the management information system needs of the entire firm. They are less focused on the immediate information retrieval or data processing needs of any one specific business unit. They are more interested in how the entire business organization does its work and how performance of people could be improved through information technology.

To do their job well,, each employee must have the information available at the time it is needed. There should not be excess information. There should not be opportunities to see more than is necessary, nor the opportunity to tamper with the system.

The drive by upper management to integrate all the units of the business, sometimes on a global scale, into one smooth information management system, is often frustrated by the individuals, departments and subsidiaries that have purchased and are using machines and systems that do not interact efficiently. When top management starts integrating the entire business organization based on a management information system, it is certain that many jobs will be terminated and many other job vacancies requiring different talents and skills will be opened. That change will alter job descriptions, making some employees obsolete and create a need for employees with different skills.

Integrating an information system affects all segments of the firm. Full integration has the goal of achieving efficiency in order to cut costs or improve the quality of the operations or both. It will take time to determine what the information system needs are. It will take time to install hardware and software. It will take time to restructure the work force through hiring, firing and retraining. The entire integration process must be carefully planned for long-term implementation. The time horizon (how far one plans or sees into the future) for bringing an integrative information system into a large corporation might be six years. This strategic change will, if successful, achieve specific objectives that will better position the firm in its future competitive environment.

Purchasing Office Supply Case:

A case of very minor significance is presented here so you can visualize what the integration process might involve. Follow the paper flow as orders are placed for office supplies in a firm with six departments. Do not study this case. Just read it through, and picture employees at different locations each sending hard copies of information to other departments in the firm.

Assume each department will need printer paper, refill cartridges and other office supplies. The departments may have a host of different brands of fax machines, computers, copiers and printers. The departments will all send their purchase orders up to the purchasing department. Purchasing will have staff that will consolidate the orders. Some of the orders may be emergency type orders because the department did not order on time. Purchasing will need to check with different vendors regarding the emergency

orders, prices on all items, terms of payment and discounts available if they order in larger quantities.

The orders are sent. Copies are made and put into an envelop for delivery to the receiving department. Another set of the orders are sent on to the accounts payable department. When the truck makes the delivery from the vendor, an employee in receiving will need to locate the order document to confirm that what was ordered was received. Hopefully the order document specified which department was to receive which material. Also, hopefully, the orders from the different departments were not mixed into the same shipping boxes. If they were, receiving will need to break open all the boxes on the shipping dock in order to sort what goes to which department. If the receiving employee cannot figure out what goes where, someone from receiving will need to meet with someone from the separate departments in order to sort out the mess.

It is not uncommon for some items not to be shipped. Receiving will then note the missing items on the order and send the order back to purchasing to see if purchasing needs to reorder. In the meantime, accounts payable has a copy of the original order and has contacted the finance department, informing them to have a certain amount of cash in checking ready to pay the forthcoming invoice. Receiving will need to send the invoice of things received and the order showing which things were not received on to accounts payable. Accounts payable will authorize payment. Sometimes the vendor might send an official invoice direct in the mail to purchasing, which then sends it on to accounts payable. Hopefully, a copy will not also go to the finance department. It is possible that both the invoice with the shipment and the following formal invoice in the mail will be paid.

This whole process of ordering office supplies is complicated and time consuming. A state-of-the-art management information system could be monitoring office supplies as they are removed from a central storage location. The supply volume could be cut by 50% or more if the equipment in all departments was standardized as part of the overall redesign of the firm's information system. An inventory management program would automatically notify the purchasing department that it was time to order when office supply stocks were low. The time to order would be based on volume discount. An invitation to bid on a large order would be placed electronically with predetermined vendors. The vendors would bid within the time requested. A manager would select the winning bid and authorize the purchase. At that time, the management information system automatically orders, automatically notifies the other vendors that they did not get the bid, automatically notifies the receiving department that this order will be arriving on a certain day which the computer selected based on how busy the receiving dock was, automatically notifies accounts payable of the order and finance of the coming payment. When receiving accepts the order, it is electronically entered into inventory through bar codes, the invoice is checked against the original order and items not delivered are reordered, accounts payable receives instructions to process payment, finance is notified of the payment date and of revised amounts.

In this case, the effort to purchase office supplies does not directly involve what the firm does to earn revenue. It is part of operating the internal tasks of the firm. The entire process of purchasing office supplies through an MIS designed system took fewer people, less time and saved money. Several jobs might be lost if such a system were put into place. Some employees would need to acquire new skills to work in such a system.

A new job description would be written to include upgrading and maintenance of the purchasing system. Some employees would be fired and new people that had the newly required skills would be hired.

If this small case situation were repeated throughout a large corporation, think what would happen in terms of efficiency, jobs created and jobs lost. Human resource management would have the task of upgrading employee job skills. The personnel department would need to issue severance notices and conduct hiring interviews at the same time. If this were done in all departments of a large corporation on a global scale, the changes would be dramatic.

Fully Integrated MIS Systems:

The task of redesigning the entire management information system is overwhelming for most firms. Many firms are struggling to maintain existing systems and cannot expect their technical staff, even if they had the expertise, to create a new fully integrated management information system. Top management of most large firms recognize the need for consistent information management throughout the organization. They understand the benefits that will be enjoyed by their customers, the efficiency gains that will be made by people working in the firm and the increase in long term profits for the stockholders. Given this great need for a fully integrated system, it is not surprising that the market place responded to that need.

Several firms offer fully integrated management information systems along with the support staff to help in the integration process. The systems are very expensive to purchase. In addition to the purchase, the firm will also expend a great deal of time and money to implement the program. These fully integrated software packages are called **Enterprise Software Systems**.

Integrated management information systems change the way a firm does business. In some cases, those responsible for strategic management in the firm may limit the firm's strategic options if the MIS system cannot be adapted to all departments within the firm.

Implementing the MIS System:

The companies that sell the management information systems to firms work to tailor the product to the specific needs of a particular firm. The team that designs and helps implement the system into the firm must fully understand how the firm does business. They must work with each department. They must see what the marketing department team sees, and they must then visualize the marketing process in terms of electronic information possibilities.

They will be enhancing, and to some degree, limiting the marketing department's ability to sell its products. Before the marketing component of the integrated system is designed the company needs to know who in the entire corporation needs to have what marketing information and when they need to have it. They also need to know the clients of the firm and how the marketing department interacts with them (as well as how shipping, accounts receivable and servicing works with them).

Employment in the MIS Field:

Management information systems is part of the information sector of the economy. We have highlighted MIS in this discussion since it is a popular route to

employment for business school graduates. We will put you in contact with some graduating seniors so you can explore this specific field and compare it to other options available in a business program. We will also provide comments from recent MIS graduates so you can get a feel for the career, its work environment and long term potential.

You will find that almost every professional position in business today demands basic computer skills. Even running a household today requires programming the VCR, the heating and cooling system for the house, the security alarm, perhaps the watering system and the satellite or cable entertainment system (TV). Many homes will soon have interactive television. Many individuals have home computers that are globally linked through the Internet.

A frightening prospect of employment is that the job requires so many hours that the best one can hope for is to maintain and keep up with the computer system at work. While you are doing just that, some third graders, as you read this, are downloading Internet data from several sites to use in a report for a school project. They will summarize the reports and submit a printed copy along with the original data to their third grade teacher.

Imagine the skill level of those individuals when they enter the job market twelve years or so from now. What will an employer think when they measure that young person's talents and eagerness against yours. Your pay might be substantially higher than that of the newcomer. That is good for you, but not so good for the firm. Will you have acquired the new skills to stay competitive and hold your own against the new competition? Can you justify your higher salary to your supervisors?

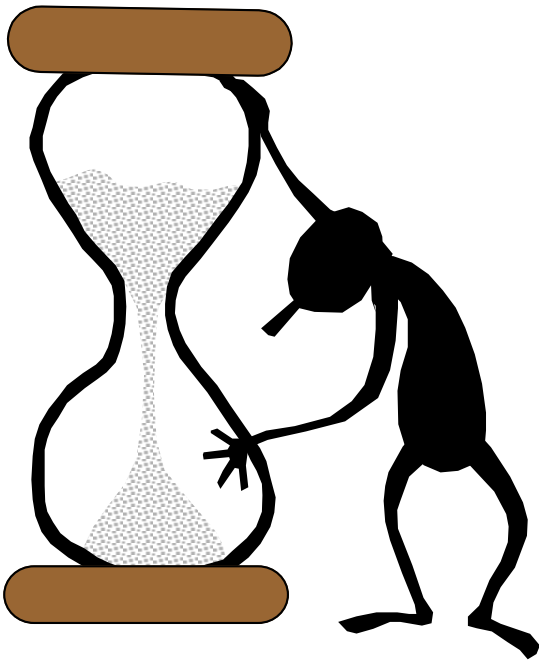
To build a career in today's business environment requires that you constantly build your skill and knowledge level. Most employers will be looking for immediate value added to the firm by hiring you. They want a short training period and expect you to "get to work". Can you easily fit into the system the firm is using, whether it is a computer on the receiving dock or calling up a customer's record on a system computer in order to answer their question? Even more important, do you have the attitude that will allow you to be flexible and adaptable as changes are made in the firm? Do you have the willingness to develop your talents on your own time and at your own expense? Will you take an MIS night course if needed? Will you take a course at the community college on using spreadsheets (Excel and Lotus are popular versions) if the firm needs you in that area?

Key Words:

- Enterprise Software Systems
- Management Information Systems (MIS)

Chapter 9

The Process of Change



"May you live in interesting times."

THE PROCESS OF CHANGE

In the chapter on management, we discussed the process of change. We noted the old Chinese proverb that change creates so many disruptions in life that it can be seen as a curse or a threat instead of an opportunity. Following is a discussion that will help you understand change as it relates to your personally. We urge you to pause and contemplate the information. It will help you visualize your life within a society that is "on the move".

Perhaps every generation considers itself to be the generation subject to change. If we could go back in time, there are many generations that would share the same feelings. Change has always been with us. The group of Native Americans living in Northern California before recorded history certainly saw change. It is thought that their civilization fell victim to technology as another group of Native Americans pushed south into their territory. The power of the new group was one of technology, the bow and arrow. In turn, that technologically superior group was replaced with the technological power of another group, the European settlers and their technology.

Change is always with us. Change, however, is not a constant. Change as a process, can evolve in a society through multiple generations. Change can also come at such speed and in sudden bursts that evolution is a most inappropriate word. Revolution is a better word to describe change that occurs so suddenly that its full impact is felt on a single generation.

You are now living in such a revolutionary period. So have the last few generations. While exact dates are difficult to provide, historians do know that the pace of change suddenly picked up in the 1700's in England. By 1800, the industrial revolution was well underway. Technological innovations in agriculture allowed a movement of workers from farming to industrial production. Industrial production, to be efficient, needed resources close by which included human resources. As a result, cities grew rapidly.

If you are wondering why we are taking a side trip into history, we believe this historic overview of the business environment is of extreme importance to you. This historic side trip may help you view where you should live, the job you should train for, and how you view the process of change as it effects your life.

The industrial revolution started in England between 1730 and 1800. After 200 to 270 years the revolution is still continuing! Certainly a very short revolution when set in the history of human kind, but it still is alive and some think it is just picking up speed. If that is true, the rate of change that people experienced in England in the early 1800's will continue in your life at an even faster pace. History lives on with important lessons for us all. How did individuals cope with such stress in their life? How well did your grandparents handle rapid change? How did they adapt and not feel left out of the system? What about your parents and relatives of their generation? Did they take the "curse" of living in interesting times, and turn it into an opportunity for themselves and their children?

The Revolution Continues:

We need to first understand the revolution in terms of business and jobs. If we can define and measure where workers are employed, we can better understand how the environment is changing. Economic and business researchers sometimes categorize areas of work where value is created as agriculture; industry; service, and/or information. The agrarian society that existed over 1,000's of years slowly evolved into an industrial society. We know that around 1730 to 1800 the industrial revolution accelerated the rate of change. According to a U.S Department of Commerce report, in the late 1880s, about 10% of the U.S. work force was employed in the information area; 25% in the service area; 25% in the production area and 40% in agriculture. By the 1930's more people worked in the industrial sector of the economy than worked the farms, orchards, and ranches. The dramatic decline in farm workers continues today. Only a few percent of the entire work force (maybe 2% to 4%) are employed in the agricultural sector. Just as surprising, is that the information sector of the economy has become the largest work force sector.

What are the consequences of such a radical change when an economy redirects its workforce? To help you picture the human cost of such change, we are going to take you on a pictorial journey to the dairy country of Northern Wisconsin. Textbooks often discuss change as an historical event, an economic event, or a part of the changing business environment. We want you to see change as part of an unfolding human drama, a drama that you are currently living in. We want you to go with us to Northern Wisconsin to see the end result of two generations of work. The first generation of European settlers cut the forest and started farms. They prospered as entrepreneurs, by fighting a hostile environment. In a rocky soil and a cold climate they became dairy farmers and operators of small milk plants and cheese factories.

The next generation faced technological change. Infrastructure improvements and new technology allowed the transportation of fresh milk over long distances. Milk and cheese were more efficiently produced in large-scale plants. The small dairy farmer was faced with a challenge. The new technologies at the dairy plants required a consistently clean raw material (milk) with certain standards of butter fat. Milk-can deliveries did not produce an acceptable quality of milk or a cost effective means of collection. The dairy farm had to have a new technology, a bulk tank system for storing milk, which was then loaded into a bulk tank truck. The bulk tank system was very expensive to install. Once installed, the only way a farmer could cover the increased fixed expense was to increase the size of the dairy herd. To increase the size of the herd required an investment in new technology for a pipeline milking system. Milking that many cows could not be accomplished by hand. The new pipeline system required an even larger herd to break-even. The change in herd size from 20 to 100 cows meant larger feed storage in barns and silos. That in turn, required new, high-tech farm equipment such as hay bailers and silo fillers. The second-generation farmers that took the risk and survived have modern farms. Some of the risk takers made mistakes along the way. Some risk takers went excessively into debt to buy the new technology. This mistake (the overuse of debt) plunged them into bankruptcy. It would appear as though taking risks might not be the thing to do. However, those that did not take the risk were doomed to failure because they couldn't compete with the bigger, better-equipped farms. In this regard, failure to take risks was the greatest risk of all.

A brave new generation of immigrants created a family farm. The next generation inherited the business. It was a proud heritage based on struggle and success. Within the lifetime of the second generation, the farm was gone, the success and dreams of a previous generation destroyed. What are the feelings of those individuals that lost the family farm? Do they feel like they personally failed? Do they feel like the system did them in? Did they simply pack up without regrets and move to a factory or service job?

Check out the Global View web site (chapter links) for a pictorial journey to see the work of the first generation dairy farmer in Northern Wisconsin and the result, when the second generation failed to adapt to the changing environment. These were real people, struggling through "interesting times".

Are those third generation dairy farmers now secure? Are their modern farms technologically up-to-date? Some dairy farmers thought the technology transition was complete and that they were among the survivors. However, there are political threats. Denmark keeps importing cheese into the NAFTA market. Milk is now being dried and can be shipped anywhere in the world. Who would have thought that milk could enter a global market? Do dairies in Europe and North America see powered milk as a new opportunity, or as a threat from low cost producers in developing nations?

While the industry ponders those threats and opportunities, another technologically driven threat or opportunity has arrived from the field of biochemistry. A new hormone can dramatically increase milk production in a cow. Does the increase in production per cow mean fewer cows are needed per farm or fewer farms? If supply suddenly increases, there needs to be a corresponding increase in demand or price will fall. This case represents the basic tenants of supply and demand at work. Demand might be increased if dairy farmers could advertise. In this case, the producer (the dairy farmer) would stimulate demand with pull promotional strategy. American farmers do have such a promotional vehicle through the American Dairy Council. But if their "Got Milk?" national campaign is not successful enough to increase demand needed to meet the new supply, prices will fall. Those dairy farmers that will be victims of the new technology in this example are those just on the edge. The economic term is **marginal**. The marginal dairy farmer will not be able to stay in business if the price paid to farmers, declines.

Winners and Losers in Change:

Change allows proactive individuals a greater opportunity to achieve material success than the rest of society. Being proactive in regards to your own life does not insure success, but it does increase the odds of achieving it.

Some industries, businesses, and individuals will not survive very well in periods of rapid change. When an industry, such as the dairy industry takes such a beating, should society help? Should the government pay dairy farmers not to add to their dairy herds? Adding to the herd increases the farm's revenue needed to cover fixed expenses. But when every dairy farmer adds a few milking cows, the supply of milk goes up and the price down. As the price drops, the farmer needs to add a few more cows. Should government allow this scenario to work itself out, or should government try to regulate how much each farmer can produce? For farmers that go bankrupt, should the government provide some type of assistance, such as a relocation or education

allowance? Or, should the capitalistic system simply be allowed to function without interference?

Education is one of the key factors allowing individuals to analyze their environment and find a way into a career, or out of a failing business, or a doomed career. Education levels the playing field so those with little or no family support or family money can still achieve success. If this is the case, wouldn't society be a better place to live in if everyone were provided access to an education? Can a society afford to offer education to the general public? Would taxpayers put up with the staggering tax bill that public education would produce?

If a system were to provide this educational opportunity to everyone in the society, what responsibility would the society as a whole have toward those that elected not to participate? What will become of the young adults that fit this description? What will become of the middle aged farmer that just lost the family farm? What will become of the older individual who cannot afford to retire but who failed to keep up with technological changes on the job?

Management:

Refer back to the chapter on management. In an extended period of rapid global change, strategic management is of key importance for any size firm. As the work force is shifted by a change in needs, management must constantly reorganize the manner in which a firm does its work in order to stay efficient and thus competitive. The jobs that need to be done in firms change as the internal environment of firm changes. Firms need to attract the new talent desperately needed in the information age. They must also constantly update the skills of existing employees through effective human resource management.

Key Words:

- Marginal

Appendix F:

Bankruptcy

With luck you will never need this final chapter. Bankruptcy is something that all firms hope to avoid. Unfortunately this is not always possible. Decision entry mistakes, tough competition, mismanaged finances and other factors can all drive a firm into bankruptcy. This chapter will help you to figure out whether you are in danger of bankruptcy and what actions you can take to salvage your firm. Sometimes it is best to abandon a sinking firm and start fresh with your hard earned knowledge.

What is Bankruptcy?:

When you have lost 100% of the stockholder's investment, your firm is considered bankrupt. More precisely, when total equity (shown on the right side of the balance sheet) equals zero. When this occurs, creditors will seize your firm's assets and begin selling them off in an attempt to regain some portion of their investment. Do not let such an event happen.

Salvage Options:

If large losses continually erode your stockholder's investment, consult with your instructor. Many options exist:

1. Issue more stock. Any time you issue stock, you must give public notice. All investors must be warned and your instructor must grant permission.

2. Search the balance sheet for assets that can be liquidated. Take the resulting cash and pay off the most expensive debt. Liquidate accounts receivable by factoring. Make an effort to keep inventory at minimum levels. This can be achieved by forecasting demand. While these actions to reduce debt and inventory will lower interest costs and improve profitability, the firm must still become competitive in the market to survive in the long run.

3. Seek a consulting partnership with a successful firm. Perhaps they will agree to payment only if and when profits reach a predetermined level.

4. Enlist the aid of Venture Capitalists. Venture Capitalists Inc. can be reached through your simulation administrator. Venture Capitalists will contact your firm via E-mail once after being contacted by your simulation administrator. These investors will exchange shares of stock for debt in a private off-line deal. They will NOT consider requests for other arrangements. Consider this your last line of defense.

5. Abandon the sinking ship; say so long, bye-bye! This will be a traumatic event for the team and for each team member. Human resource management must be applied to your best ability. Remorse and depression can only be a momentary event. The team must pick itself up and start a new venture. Securing permission from your instructor for a firm closing and the opening of a new firm may require a grade concession or extra work agreements (such as a major paper on why the firm failed).

When to Declare Bankruptcy:

Should you let the firm die? The answer is, sometimes. Most firms that find themselves in trouble can eventually work themselves out of it. The team needs to pull together and work harder. Realizing early on that the firm is headed for trouble is the best defense against bankruptcy. If the firm consistently brings in a net loss or makes a terrible error and suffers an extremely large loss in a single quarter, monitor the Total Equity listing on the Balance Sheet (shown on the right side). If Total Equity gets below $800,000 be sure to ask your instructor or the Global View tutors for help.

Most severe problems come about because members of the team failed to read the text or analyze reports. The other major reason for bankruptcy is failed human resource management. It is very important that all team members work together to share responsibilities of operating the team. Members of the team that do not fully understand information gathered from reports should not be solely responsible for making decisions. Remember from Chapter 1, the process for decision-making your team agreed to. Now that your team is fully operational within the simulation, the team should have a good understanding as to whether or not this process works well. If the process your team agreed to early on does not work well, now is the time to redefine this process. Another option is to relocate one or two executives to another team and attempt to hire new executives onto your team. You should have instructor approval before attempting any team switching.

The Process of Starting Over:

It may be difficult to admit defeat and start over. Many teams become attached to their firm and hate to give it up. However, it is much more fun to operate a successful business, in comparison to the constant struggle of trying to revive a badly damaged firm. Starting over, knowing what you know now, will not only be more fun, but will probably give team members a better learning experience, applying what they have learned.

To close an existing firm and start another, your firm must have permission from your instructor. Once permission is secured, your simulation administrator will erase the entire history of your firm and you will start from scratch in the following quarter by making all startup decisions (issuing stock, hiring a sales force, setting prices, etc.). When entering new decisions, you will see old decisions remaining in your decision form. Ignore these numbers and replace them with your new set of decisions. Old decisions will not download to your new decision file for processing. Be sure that you enter all new decisions and hit the submit button to be sure these decisions are transferred to the database for processing.

Appendix G:

Quick Guide to Decision and Contract Entries

This guide is not meant to replace chapters of the text. It is still very important that you thoroughly read each chapter of your text. Use this guide as a quick reference when you are at the computer entering decisions. Remember… when in doubt ask your simulation administrator for help.

To Login to the Simulation

- Go the Association Global View website: http://www.globalview.org
- Click on the "**Simulation**" tab at the top of the homepage
- Type in the login and password your instructor provided your team (using all lower case letters)
- Click on the "Login" button

Simulation Login

Login: introfirm18
Password: xxxxx

Login

To Review Your Firm Profile or Change Your Password

Click on the plus symbol (+) next to "Management".

- Management
+ Firm Profile
+Change Password
+ Intro Game

Firm Profile -- allows team members to enter the firm's name, a common e-mail address used by the team, the firm's mission statement, product names for each area, and a URL for a team's website.

Change Password -- allows a team to change their password by which they enter the simulation. If your firm chooses to utilize this feature, be sure that everyone on the team is made aware of the change and the new password.

To Enter Decisions

Your team will not have access to the decision/contract decision menus until all subscription fees for this program have been paid. If your team does not see the "Intro Game" option when you log on to the simulation, be sure that everyone on the team has paid their portion of the subscription fee. If everyone has paid and you still do not have access to decision/contract menus, contact your simulation administrator immediately.

Click on the plus symbol (+) next to "Intro Game". To enter decisions, click on the plus symbol next to "Decisions". From the list that appears below the "Decisions" heading, select the decision form you are interested in updating.

+ Management
- Intro Game
- **Decisions**
  - **Marketing**
  - **Budget**
  - **Financial**
  - **Shipping**
- **+ Contracts**
- **+ Firm Reports**
- **+ Market Group Reports**

***Absolutely NO entries should be made with commas. Be sure to hit the submit button after any portion of a decision form has been updated. A decision form can be updated as many times as needed between quarters. Only the most recent entries in the decision forms submitted to the database will be collected for processing.**

Marketing Decision Form

Advertising

Area 1 Product1 _____ Product2_____

Area 2 Product1 _____ Product2_____

Prices

Set product prices for 1 unit (1 shipping case) of product.

Area 1 Product1 _____ Product2_____

Area 2 Product1 _____ Product2_____

Sales Representatives

Area 1 Total Number Desired _____ Current Number: 0

Area 2 Total Number Desired _____ Current Number: 0

Sales Trainees

Change in Number of Trainees (negative number to reduce)_____Current Number: 0

Change in Sales Rep Salaries

Area 1 Increase or decrease pay _____Current Pay: 0.00

Area 2 Increase or decrease pay _____Current Pay: 0.00

Change in Commissions

Area 1 Increase or Decrease Product1 Commissions_____Current: 0.00
Increase or Decrease Product2 Commissions_____Current: 0.00

Area 2 Increase or DecreaseProduct1 Commissions_____Current 0.00
Increase or Decrease Product2 Commissions_____Current 0.00

Credit Policy

0 = No Policy 5 = Strictest Policy

O 1 O 2 O 3 O 4 O 5

Marketing Decision Form

Advertising -- Enter the amount of advertising money your firm will spend per product, per area for the current quarter. Entries DO NOT build on previous quarter's entries.

Prices -- Enter the prices your firm would like to set per product, per area. Enter Area 2 prices in EURO's. You can see the previous quarter's exchange rate listed in the Economic Report (a subcategory of the Market Group Reports). In the opening quarter, exchange rates are listed in *Dollars and Scents Quarterly*. Prices DO NOT build on previous quarter's entries.

Sales Reps -- Enter the NEW TOTAL amount of sales reps your firm would like in each area. Never enter a zero or your firm will have zero sales reps (any reps you did have will be fired). If you increase the amount of sales reps, the program will automatically check to see if your firm has any trainees trained and ready to be placed. If no trained trainees are available the program will automatically hire an experienced sales rep.

To place trained trainees as sales reps, enter the new total amount of sales reps into the sales rep decision form (previous sales reps plus trainees being placed as reps).

To transfer a sales rep from one area to another, decrease the total amount of reps you want to move from one area and increase the number of reps by the amount you are transferring in the new area. Entries DO build on previous entries.

Trainees -- Enter the NEW TOTAL amount of trainees your firm would like to hire. Never enter a negative number or you will fire trainees you have already trained. If for some reason you have trained trainees but do not want to place them as sales reps, and you do not want to hire or fire any trainees, enter a zero into the trainees decision form. Entries DO build on previous quarter's entries.

Change in Sales Reps Salary -- Enter the amount by which your firm would like to *increase* or *decrease* (with a negative sign) the sales rep's salaries. After your first set of results are returned if your team is satisfied with the salaries you have set for sales reps, enter a zero into the salary decision to prevent the salary from increasing. Entries DO build on previous quarter's entries.

Change in Commissions -- Enter the amount by which your firm would like to increase or decrease (with a negative sign) the sales rep's commissions. After your first set of results are returned, if your team is satisfied with the commissions you have set for sales reps, enter a zero into the commission decision forms to prevent the commissions from increasing. Entries DO build on previous quarter's entries.

Credit Policy -- Click on the number your firm wants to set for credit policy (0 being no policy and 5 being the strictest policy).

Budget Decision Form

Quality Control
Quality Control Budget _____
Percentage of Budget to be spent on Product 2%_____

Budget Decision Form

Engineering Studies -- NO ENTRY REQUIRED. This entry is only for manufacturers.

Quality Control -- Enter the total dollar budget your firm wants to spend on QC for all products in all areas. Then, enter the percentage of that budget your firm wants to spend on Product 2. Entries DO build on previous quarter's entries.

Product Improvement -- NO ENTRY REQUIRED. This entry is only for manufacturers.

Financial Decision Form

Short Term Investment

Enter New Short Term Investment Amount _____

(Investment is limited to cash on hand at end of last quarter, less cash spent on contracts - required to maintain $10000 cash balance)

Short Term Investment Options

- O 0 A portfolio of U.S. Treasury Bills
- O 1 ECU Government Obligations
- O 2 An investment in the BearBull Index Fund
- O 3 An investment in the BearBull Index Fund through an ECU Investment House

Factor Receivables

Enter dollar amount to be factored _____

Short Term Loan

Enter Amount of Short Term Loan _____

Change in Term Loan

Enter Change in Term Loan _____

Current Term Loan = 0.00

Change in Bonds

Enter the dollar amount of Bonds to be issued_____

Enter the dollar amount of Bonds to be repurchased _____

Current Bonds = 0.00

Issue or Repurchase Common Stock

Enter the number of shares to be issued_____

Enter the number of shares to be repurchased _____

(Repurchase limited to 10% of outstanding shares)

Current Stock = 0

Declare Dividends

Enter Dividend per Share (restricted to $.50 cents increase per quarter)_____

Last Quarter's Dividend = 0.00

Financial Decision Form

Short Term Investment -- Enter the total amount of cash your firm would like to invest. Then click on the investment option your firm would like. Entries DO NOT build on previous quarter's entries.

Factor Receivables -- Enter the total amount of receivables your firm would like factored. These are receiveables that your firm would otherwise see on the balance sheet in the coming quarter. If you enter an amount that is higher than the actual amount of receivables your firm would collect, the total amount of receivables owed to your firm will be factored. Entries DO NOT build on previous quarter's entries.

Short Term Loan -- Enter the total amount of short-term loan your firm would like to borrow for the coming quarter. The loan will automatically be repaid in the *following* quarter as will the interest incurred from the loan. Entries DO NOT build on previous quarter's entries.

Change in Term Loan -- To increase the term loan, enter the new amount your firm would like to borrow. Any new term loan taken out will be added to the outstanding loan balance from earlier quarters. To reduce an existing loan, enter the amount you want to repay with a negative sign.

Change in Bonds -- In this decision form there is an option to issue bonds and an option to repurchase bonds. To increase the amount of bonds your firm has issued, enter the new amount your firm would like to issue in the "Issue Bonds" decision form. Any new bond issue will be added to the total amount of bonds previously issued in earlier quarters. To repurchase bonds, enter the dollar amount of bonds to be repurchased (without a negative sign) in the "Repurchase Bonds" decision form.

Issue or Repurchase Common Stock -- In this decision form there is an option to issue stock and an option to repurchase stock. To increase the amount of stock your firm has issued, enter the new amount of shares your firm would like to issue in the "Issue stock" decision form. Any new stock issue will be added to the total amount of shares previously issued in earlier quarters. To repurchase stock, enter the amount of shares to be repurchased (without a negative sign) in the "Repurchase Stock" decision form.

Declare Dividends -- Enter the amount your firm would like to issue as a dividend to stockholders.

Shipping Decision Form

Standard Ocean Freight Shipping Order:
Ship from Area1 to Area2
_____Units of Product1
_____Units of Product2

Ship from Area2 to Area1
_____Units of Product1
_____Units of Product2

Product 1:
O Yes, I want Just-in-Time shipping
O No, I do not want Just-in-Time shipping

Product 2:
O Yes, I want Just-in-Time shipping
O No, I do not want Just-in-Time shipping

Shipping Decision Form

Standard Ocean Freight Shipping Order -- Enter the amount of product your firm would like shipped from one area to the other. Units must be shipped in lots of 1000, with a minimum shipment of 1000. See the Scent Industry Appendix for information on costs.

Emergency Shipping -- Click yes if your firm would like to air freight one unit of product as needed from an area where product is overstocked to an area where inventory is at zero. Emergency shipping decision entries are by product type. See the Scent Industry Appendix for information on costs.

Practice Decision Forms

Marketing Decision Form

Advertising:

	Area 1	Area 2
Product 1	_____	_____
Product 2	_____	_____

Prices:

	Area 1	Area 2
Product 1	_____	_____
Product 2	_____	_____

Sales Reps:

Area 1	Area 2
_____	_____

Trainees: _____

Change in Sales Rep Salaries:

Area 1	Area 2
_____	_____

Change in Sales Rep Commissions:

	Area 1	Area 2
Product 1	_____	_____
Product 2	_____	_____

Credit Policy:

0 1 2 3 4 5

Budget Decision Form

Quality Control

Quality Control Budget_____
Percentage of Budget to be spent on Product 2 _____%

Financial Decision Form

Short Term Investment _____

Short Term Investment Options

0. A portfolio of U.S. Treasury Bills
1. EURO Governments Obligations
2. An Investment in the Bear/Bull Index Fund
3. An Investment in the Bear/Bull Index Fund through an EURO Investment House

Factor Receivables: _____

Short Term Loan:_____

Change in Term Loan:_____

Issue or Repurchase Bonds

Issue Bonds _____
Repurchase Bonds _____

Issue or Repurchase Common Stock

Number of Shares to be Issued _____
Number of Shares to be Repurchased _____

Declare Dividends: _____

Shipping Decision Form

Standard Ocean Freight Shipping Order:

Ship from Area 1 to Area 2

_____Units of Product 1
_____Units of Product 2

Ship from Area 2 to Area 1

_____Units of Product 1

_____Units of Product 2

Emergency Shipping

Product 1:

_____Yes, I want Just-in-Time shipping
_____No, I do

Product 2:

_____Yes, I want Just-in-Time shipping
_____No, I do

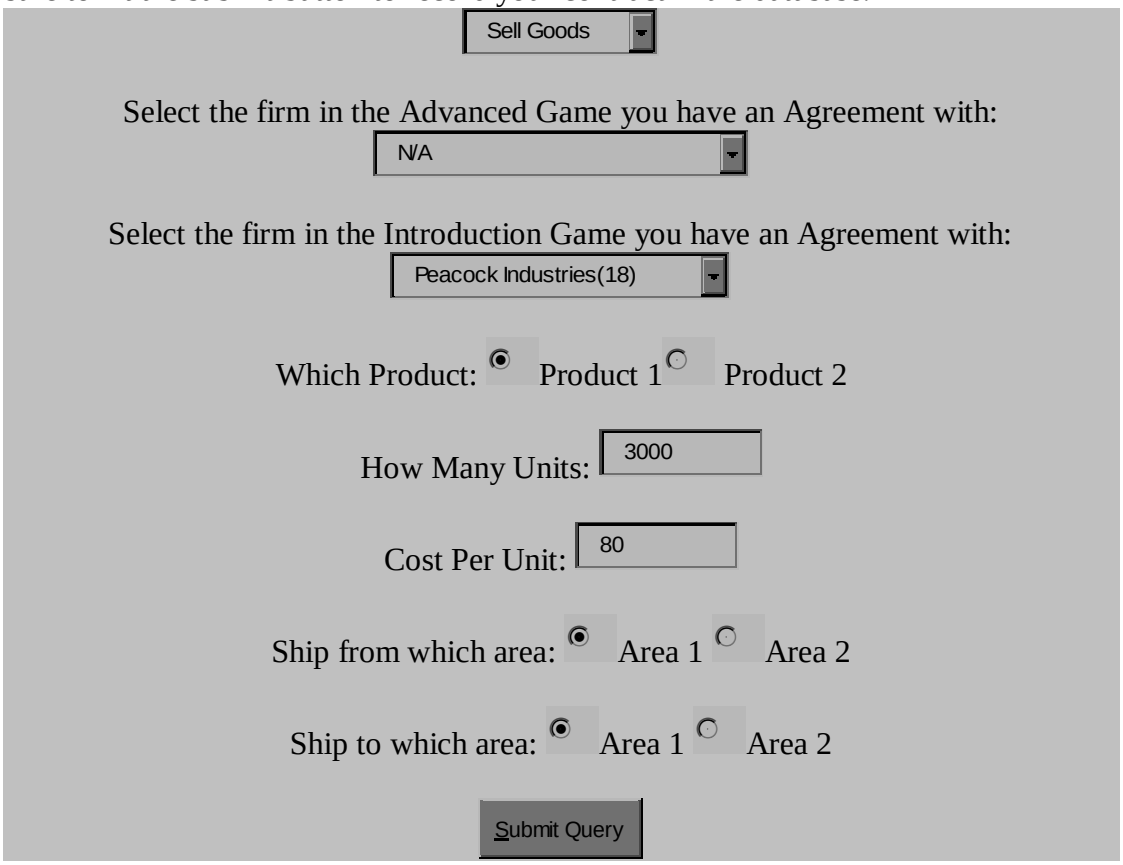
Quick Guide to Entering Contracts

Step 1: Login to the simulation
Step 2: Click on the plus sign next to the "Intro Game"
+ Management
+ Intro Game
Step 3: Click on the Plus sign next to "Contracts" to bring up the list

+ Management

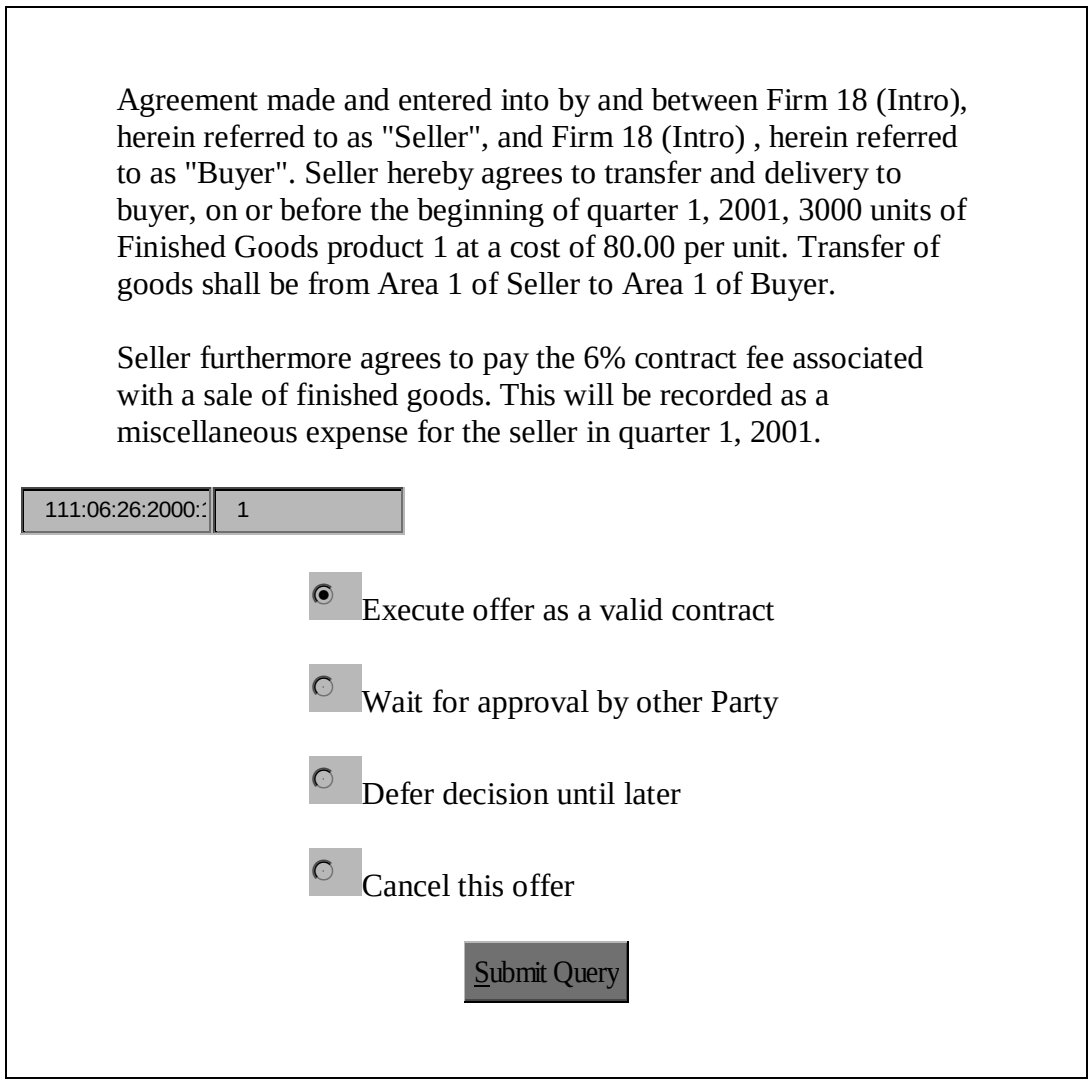
- Intro Game
  + Decisions
  - Contracts
    Current Contracts
    Buy/Sell Goods
    Consulting Services

Step 4: Click on "Buy/Sell Goods". Next in the contract form select "Buy Goods", and select the firm number of the team you had an agreement with. (If you are entering a contract with Peacock, choose firm number 18 from the list of Intro Firms. Next, select the product type, enter the number of units, enter the price per unit, enter the area your manufacturer requires you ship from, and the area you want the product shipped to. Be sure to hit the submit button to record your contract in the database.



After submitting the contract to the database, a confirmation screen will appear. Read through the confirmation to make sure the contract reads as you entered it. If the contract is exactly what you want, select the "Execute" button and then hit "submit". If you do not select the "Execute" button but do hit submit, the contract will not record to the database and you will not receive your contracted goods. If you Execute but do not submit, there will be no record of your order. At this point you have entered the contract and must go through and submit the confirmation one more time. E-commerce contracts are legally binding. The confirmation process is a safety measure to give you one last chance before electronically committing the firm to the details of the contract.

Confirmation Example



You will need to repeat this process for each type of product you order in each area.