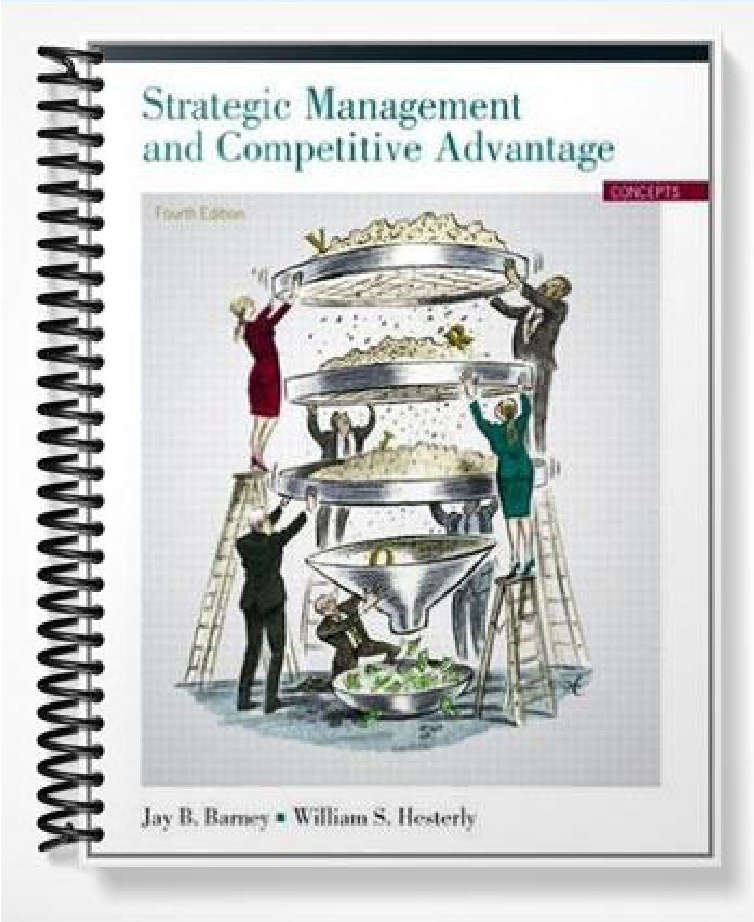
SOLUTIONS MANUAL



2

Evaluating a Firm's External Environment

WHY EXTERNAL ANALYSIS?

Students need to come away from this class session with a sound understanding of 1) why external analysis is a critical element of the strategic management process, 2) how to do an effective external analysis, and 3) what to *do* in response to external analysis. External analysis, as presented in the text, is intended to help firms understand the threats and opportunities that exist in the competitive environment in which a firm operates. A good grasp of these threats and opportunities tell a firm what it *should* do given what the firm faces. As such, external analysis is a necessary precursor to strategic choices. It wouldn't make much sense for a firm to begin making strategic choices without knowing what it faced in the external environment.

Firms that fail to do appropriate external analysis face the risk of encountering threats that were not anticipated in the strategic management process. Likewise such firms may also miss out on opportunities. Of course, external analysis cannot identify every possible threat and opportunity, but it can greatly increase the probability that a firm's strategy will be able to neutralize threats and exploit opportunities. Firms that take a disciplined approach to external analysis will likely have an advantage over those firms that embark upon strategies without taking the time to understand the external environment.

A good analysis of the external environment may allow a firm to face threats and opportunities at a point in time when the firm does not have resources committed to a particular strategy. For example, a firm contemplating entry into a new business may discover a significant threat through its external analysis before actually entering the new business. Such a discovery would allow the firm to either abandon the idea or adopt a strategy that would neutralize that particular threat.

The following teaching points suggest an engaging way to begin this session and get students to recognize the importance of external analysis.

🗁 *Teaching Points*

- Tell the students to assume they have just been informed that they have won an all expenses-paid extreme adventure vacation to one of the world's most challenging destinations in a distant country.

- Tell the students they have to be packed and ready to depart by early the next morning.
- Ask the students what they will pack.
- Students will usually respond with questions about where they will be going.
- Ask them what kinds of things they want to know about the destination.
- Use your creativity in answering their questions.
- Ask them why they wanted to know particular things about the destination.
- Ask them how their vacation might have turned out if they didn't have the information you provided.
- Tell students they have just engaged in external analysis.
- Inform students that you will first take them through the "how" of doing an external analysis and then conclude the session by discussing things that firms can "do" in response.

Slide 2-2

Use this slide to show students why external analysis is important. Stress that seeing threats and opportunities as part of an analysis may be a lot less painless than seeing them after the firm has made its strategic choices.

TWO LEVELS OF EXTERNAL ENVIRONMENT

External analysis consists of looking at two 'levels' of environment: the general environment and the industry environment. The general environment is the environment in which all firms in an economy operate, regardless of a firm's specific industry. Elements of the general environment have a potential effect on every firm in an economy.

Slide 2-3

This slide will help you introduce external analysis in an overview fashion. Begin with the firm and move to the industry and the forces that influence industry profitability. Then move to the general environment and its six elements. A little rehearsal with the slide animation will be helpful.

General Environment

Learning Objective 1

Describe the dimensions of the general environment facing a firm and how this environment can affect a firm's opportunities and threats.

Slide 2-4

Use this slide to take student through the general external environment. Use the examples below to help explain how elements of the general environment create threats and opportunities.

Analysis of the general environment aims to identify conditions or trends that may present opportunities and/or threats to a firm. Six elements of the general environment are:

- technological change
- demographic trends
- cultural trends
- economic climate
- legal and political conditions
- specific international events

An effective analysis of the general environment will include a close look at each of these elements to determine if there are conditions and/or trends that will affect the focal firm.

Important Point: A condition may present opportunity to one type of firm and a threat to another type of firm. For example, a falling unemployment rate (economic climate) presents opportunity to a manufacturer of home appliances and a threat to fast food restaurants. Falling unemployment means disposable incomes are likely to rise, allowing people to spend on larger ticket items like washing machines. Falling unemployment also means that workers have more and better options for employment, meaning that low paying fast food restaurant jobs will be more difficult to fill.

The following list provides an example of a trend or condition in each element of the general environment and an opportunity and a threat that trend or condition may present:

Technological Change

Convergence and integration of personal digital assistants (PDA) and mobile telephones
Opportunity: Motorola can produce a higher margin product packed with features of both PDAs and mobile phones. Existing users of both products will demand the new technology
Threat: PDA producers such as Palm will be forced to either: 1) compete directly with the likes of Motorola, or 2) cooperate with mobile phone producers through licensing, joint venture, or outright sale.

Demographic Trends

Rapid expansion of the Hispanic population in the United States
Opportunity: Large grocers like Wal-Mart and Albertson's can serve this market by offering large ethnic foods sections.
Threat: Small neighborhood grocers that have served a localized Hispanic market must now compete with large grocers.

Cultural Trends

Driving large, gas-guzzling SUV's becomes regarded as being environmentally insensitive
Opportunity: Producers of small, fuel-efficient cars can exploit the cultural trends by promoting environmentally friendly cars.
Threat: Producers of SUV's are beginning to see sales of their high margin SUV's decline.

Economic Climate

Rising interest rates

Opportunity: Banks can earn higher margins on their credit products and deposits will likely grow as higher interest rates allow banks to compete more effectively for consumers' savings.
Threats: Homebuilders can expect a slow down as home construction loans and mortgages become more expensive for consumers.

Legal and Political Conditions

The U.S. government changes its policy toward oil exploration on public lands—allowing extraction of previously restricted oil deposits
Opportunity: Small U.S. exploration companies can sub-contract to large oil companies to find new oil deposits on public lands.
Threats: Foreign oil interests may face increased world supply and declining prices.

Specific International Events

A trade dispute results in a ban on importing U.S. hormone-treated beef into the European Union
Threat: U.S. beef producers face a sudden drop in demand and the resulting price decline.
Opportunity: Argentine beef producers, who don't typically use growth hormones, face a sudden increase in demand for their product and the resulting price increase.

Teaching Points

- After offering a brief explanation of the elements of the general environment, ask students for examples of conditions and trends. Use the examples offered above to help fill in the blanks.
- Encourage students to see how conditions and trends lead to opportunities and/or threats.
- Stress that a good analysis of the general environment will include a close look at each element, even though each element may or may not yield any opportunity or threat.
- Point out that spotting trends before competitors may lead to competitive advantage.
- Ask students if recent spikes in gas prices could have been anticipated.
- Explain that elements of the general environment may influence other elements. Destruction of an oil port in the Persian Gulf may lead to higher unemployment in the U.S. as the resulting spike in gas prices hurt sales of SUV's and trucks which may result in plant closures, etc.

Industry Environment

Learning Objective 2

Describe how the structure-conduct-performance paradigm suggests that industry structure can influence a firm's competitive choices.

The industry environment consists of elements or forces that the focal firm faces directly. Whereas interest rates in the general environment may have an indirect effect on a firm, the firm's customers have a more direct effect.

Slides 2-5 and 2-6

Emphasize how the S-C-P was developed to try to prevent anti-competitive industry behavior and now it's used to try to facilitate above normal returns, which would have been considered anti-competitive. Help students appreciate the underpinnings of the Five Forces Model.

Porter's Five Forces model is a very popular way of looking at the industry in which a firm operates. An understanding of the theoretical heritage of the Five Forces model will make it more meaningful to students. The S-C-P (Structure, Conduct, Performance) framework from industrial organization economics is the economic tradition from which Porter developed the Five Forces. The S-C-P framework was originally developed with the intent of helping economists and policy makers understand when an industry was likely ***not*** to be competitive. Competitive industries were the ideal—social welfare was maximized, there were no monopoly profits being extracted from markets.

Management scholars who were more interested in individual firms began to see that the S-C-P framework was useful for identifying market imperfections that would possibly allow firms to make above normal economic profits. In this tradition, Michael Porter developed the Five Forces model. Thus, in a very real sense, Porter's Five Forces is a matter of standing the S-C-P on its head—at least in terms of purpose.

Important Point: Industry analysis is based on well-established economic theory, even though in strategic management it is used for a nearly opposite purpose than that for which it was originally developed. Students need to understand that the well-worn Five Forces tool is deeply rooted in sound theory.

Teaching Points

- Emphasize that industry analysis is done with the intent of identifying opportunities (market imperfections) that can be exploited and/or threats that can be neutralized through some strategic action.
- Point out that an industry analysis that reveals few, if any, imperfections suggests that firms in that industry are most likely to achieve competitive parity—no one firm is likely to have an advantage over other firms.
- Depending on the economics exposure your students have had, it may be helpful to call attention to the fact that industry analysis is the antithesis of economic models aimed at maximizing social welfare.
- This is the set up for your coverage of the Five Forces Model. After going through the Five Forces, the questions posed in the Discussion & Activity box usually lead to a good discussion of the ethics of strategy.

Five Forces Framework

Learning Objective 3

Describe the 'five forces model of industry attractiveness' and indicators of when each of these forces will improve or reduce the attractiveness of an industry.

Slide 2-7

You can either use this graphic to handle your whole discussion of the model or you can use it to simply introduce the model and use the text slides that follow. In either case, emphasize that the model tells us that if threats are high, profits will tend to be lower. Emphasize that Five Forces Analysis is always done from the point of view of the focal firm. Suppliers are those that supply to the focal firm, buyers buy from the focal firm.

In our experience, students have often seen the Five Forces framework in other classes such as marketing and/or operations management. Their exposure is usually cursory or perhaps even superficial. Don't be discouraged if students claim they've seen this all before. You'll be able to add significantly to their understanding.

Important Point: A Five Forces analysis is done from the point of view of the focal firm (e.g., your client, your employer, or your own company). Students sometimes become confused when they try to assess the threat of suppliers and buyers and begin to question if their client is the buyer or the supplier. To be clear, the suppliers are those who supply to the focal firm. The buyers are those who buy from the focal firm.

The five forces are:

- the threat of entry
- the threat of rivalry
- the threat of substitutes
- the threat of suppliers
- the threat of buyers

These five forces are at work in both domestic and international contexts. Firms can and should apply the model in both contexts. Increasingly, an effective external analysis will include consideration of the fact that these forces may be affected by international influences. For example, an analysis of the textile industry in the U.S. would be woefully incomplete without considering the effects of Pacific Rim influences on each one of the forces.

Important Point: The Five Forces model is based on reasoning aimed at identifying market imperfections that may be exploited by a firm. An industry is considered to be attractive if there are imperfections that can be exploited. An industry is unattractive if there are relatively few imperfections. In other words, the closer the industry is to perfectly competitive, the more unattractive it is.

Slide 2-8

Make sure that students understand why a high threat of entry is an unattractive thing—above normal profits will be bid away. Explain that if someone had a new technology that was very valuable, they wouldn't want to deploy it in an industry where entry was easy because profits would be quickly competed away, unless the technology was protectable in the presence of many competitors.

Threat of Entry. If above normal profits exist in an industry:
1) firms outside the industry will have incentive to enter the industry,
2) if firms can easily enter the industry any above normal profits will be quickly dissipated through competition—new firms will have incentive to lower prices and costs of production
3) above normal profits can be preserved if would-be entrants face a cost disadvantage in entering.

Therefore, a high threat of entry makes an industry unattractive because any above normal profits will be quickly dissipated. Barriers to entry help create the cost disadvantages necessary to minimize the threat of new firms entering the industry. Foreign governments have an interest in controlling entry into industries within their borders. Usually these interests take the form of trying to protect domestic firms. However, in the process of trying to protect domestic firms foreign governments may actually help create more attractive industries by erecting barriers to entry. Even though import policies may impose higher costs on foreign firms wanting to enter a country, the industry would be considered more attractive because the barriers. Higher profits can be expected for those firms who are able to enter.

Four barriers to entry are:
1) economies of scale
    a. the minimum efficient scale of production may be so high that firms not already in the industry could not afford the plant size needed to enter
    b. the minimum efficient scale may be so high that the entry of another firm of sufficient size to compete on cost would create excess capacity in the industry and drive down prices—would be entrants recognize this and rationally choose not to enter
2) product differentiation
    a. product differentiation means that customers can recognize a difference between products and therefore have a preference for the product of one firm over another
    b. new entrants face the prospect of having to both offer a newer, better product and convince customers to try the new product—new entrants face additional costs and rationally choose not to enter
3) cost advantages independent of scale
    a. incumbent firms may enjoy cost advantages over would-be entrants due to supplier relationships, experience (learning curve advantages), proprietary technology, location advantages (close to rail terminals, harbors, etc.), favorable access to raw materials, etc.—firms outside the industry recognize these advantages and rationally choose not to enter
4) government policy
    a. a government may decide to regulate an industry, like electricity, and either explicitly forbid additional entry or make it so costly that entry is not cost effective

5) governments may decide to protect domestic industries by not allowing foreign firms to invest in certain industries or raising the cost of entry so high that foreign firms find it difficult to compete
    a. governments can use tariffs, quotas, and nontariff trade barriers as barriers to entry

Slides 2-9 and 2-10

Use this slide to cover the points explained above. In particular, use slide 2-10 to show how economies of scale can result in dramatic decreases in cost of production, thereby acting as a significant entry barrier for new entrants who may not be able to match incumbents' scale. Emphasize the possibility of international issue when considering barriers to entry. Explain that high barriers mean low threat of entry. Therefore, we would want to be in industries with high barriers to entry. We wouldn't want to be in industries that were easy to enter.

Teaching Points

- Point out that incumbent firms have an incentive to signal the existence of barriers to entry.
- Explain that new entrants are often spoilers because they are desperate to gain market share quickly in order to survive. They may lower price only to find that incumbents will match price, and therefore, market share does not change, there's just lower overall prices for all players.
- Students often wonder if high barriers to entry are really an attractive feature of an industry if the focal firm is considering entering the industry. High barriers to entry are an attractive feature whether the focal firm is already in the industry or is contemplating entry. In either case, the focal firm would not want to face additional entry.
- Emphasize that foreign governments can directly make an industry more or less attractive. They can also make an industry within their borders strictly off limits to foreign firms.

Threat of Rivalry. The threat of rivalry depends on firms' willingness to engage in competitive practices like price wars, adding product features, offering credit terms, etc. Industries in which firms are readily willing to engage in these competitive practices are considered unattractive. Given certain industry characteristics, firms have incentives and are willing to engage in these practices. Rivalry with international rivals can be particularly intense when the foreign rival has lower costs.

1) large numbers of competitors of roughly the same size, no recognized industry leader
    a. without an industry leader, firms are slow to recognize and respect interdependence—there is little restraint—no polite rules of engagement
        i. laptop producers are experiencing this as the many competing firms quickly lower price in response to one another

2) slow or declining industry growth
    a. new customers must be taken from competitors
        i. cell phone market—early on new customers came from outside the market (i.e., first time cell phone users), in time, new customers had to be taken from competitor cell phone companies
3) high fixed costs and/or high storage costs
    a. such high costs mean that firms will be highly motivated to make each sale
        i. an airline will cut price to fill an additional seat because variable cost is a small fraction of fixed cost and therefore most of the ticket price will be profit once fixed costs are met
        ii. a broker will be very motivated to move a warehouse full of oranges that are costly to store and that have a limited shelf life
4) lack of product differentiation
    a. this leaves price as the only point of competition and firms have the incentive to cut price to get sales volume
        i. many food items like butter, milk, rice, fresh beef, etc. where branding has not proven highly effective compete primarily on price
5) capacity added in large increments
    a. any addition to industry capacity usually means there will be oversupply in the industry and firms will have an incentive to cut price in order to make sure they are able to sell their product
        i. aircraft manufacturers Boeing and Airbus have experienced this since Airbus entered the industry

Slide 2-11

Emphasize that industry conditions exert a compelling force on rivalry. Point out the importance of looking closely for these industry characteristics. Use some of the examples listed above to help make these points.

Teaching Points

- Emphasize the relationship between these industry structural characteristics and the firm behavior that is likely to result.
- Point out that the rivalry behavior that firms are trying to avoid is simply the behavior we would expect in a competitive market.
- Emphasize that firms want an industry structure in which firms do not have strong incentives to compete on price or engage in other competitive practices. The presence of foreign competition with lower costs and/or government subsidies will make rivalry more intense because such rivals have a strong incentive to compete on price.

Learning Objective 4

Describe how rivals and substitutes differ.

Threat of Substitutes. Substitutes meet the same consumer need but do it in a different way whereas rivals meet the need in the same way. Coke and Pepsi are rivals in the cola market. Milk is a potential substitute for both Coke and Pepsi. Ford, GM, Honda, Toyota, and Nissan are rivals in that they all produce a small fuel-efficient car. Public transportation systems are substitutes for these small cars.

Slide 2-12

Make sure that students understand the difference between rivals and substitutes. A little extra time spent at this point can avoid larger problems later. Emphasize the wisdom of looking beyond the focal firm's industry for possible substitutes.

Important Points:

1) Substitutes create a ceiling on prices and profits. If the substitute is close (in terms of filling the customer need) to the focal firms product, then customers may switch because of relatively small price differences.
2) Almost by definition, recognizing substitutes may require looking outside the focal firms industry. Managers should take a methodical approach to examining the external environment to spot potential substitutes.
3) Students sometimes confuse rivals and substitutes. The threat of rivalry arises from competitive interaction with currently competing firms that are attempting to fill a consumer need in essentially the same way. The threat of substitutes arises from the potential that consumers will switch to a substitute and fill their need in a different way.

Teaching Points

- Emphasize the difference between rivals and substitutes as explained above.
- Remind students that the substitutes about which a focal firm should be concerned may not be on the firms' current radar map. They may need to look in unexpected places to spot the substitutes that matter.

Threat of powerful suppliers. Suppliers pose a threat to firm and industry profits to the extent that the market in which the focal firm buys from suppliers is ***not*** competitive. Market imperfections may allow suppliers to extract above normal profits from the focal firm. Several market imperfections that might allow suppliers to extract profits at the expense of a focal firm are:

1) a small number of firms in the supplier's industry
    a. an industry marked by small numbers is more likely to behave as an oligopoly—they have figured out that it is in their best interests not to compete on price
2) the product being supplied is unique or highly differentiated
    a. a supplier with a unique or highly differentiated product is not subject to the pricing pressure of a perfectly competitive market—if a focal firm wants the product, it will have to pay the supplier's price

3) there are no close substitutes for the supplier's product
    a. if there are no close substitutes, the supplier is not constrained in pricing
4) the supplier could vertically integrate forward
    a. if a supplier can present a credible threat of becoming the focal firm's competition (entering the same business), then the supplier has bargaining power over the focal firm—pay my price or I'll become your competition
5) the focal firm is an insignificant customer to the supplier
    a. if the focal firm is one of many buyers of the supplier's output and/or purchases a small percentage of the supplier's output, then the supplier will have little incentive to offer price concessions

Slide 2-13

Explain that powerful suppliers have an incentive to capture the maximum value possible from the focal firm, thus driving down firm and industry profits. Encourage students to look carefully for industry conditions that will give suppliers relatively more power.

Teaching Points

- Explain that the threat of suppliers can play out in several different ways: the supplier may refuse to pass along price decreases due to efficiencies, the supplier may readily pass on price increases on materials, the supplier may offer poor service and/or lower quality, the supplier may refuse to offer credit terms and/or just-in-time delivery, etc. All of these have the effect of allowing the supplier to extract value from the exchange at the expense of the focal firm.
- Point out that the power of suppliers is a bit of a numbers game. If there few large suppliers selling to a large number of firms like the focal firm, the suppliers enjoy a powerful bargaining position. The emergence of international suppliers could rather quickly change the numbers dynamics in an industry.
- Emphasize that even if suppliers are not currently engaging in any of these threatening behaviors, the presence of the above industry characteristics should be taken into careful consideration because conditions may change.

Threat of powerful buyers. Just as powerful suppliers may be able to limit firm and industry economic returns, powerful buyers may also extract above normal returns by exploiting market imperfections. The threat posed by buyers is increased if one or more of the following conditions exist:

1) there is a small number of buyers of the focal firm's output
    a. if a firm is trying to sell into a market that has only a few buyers, those buyers will have a relatively more powerful bargaining position because they can play the sellers (focal firm) off one another

2) the product being sold is a commodity (undifferentiated and/or standard)
    a. undifferentiated products imply that buyers have no preference for the output of any one firm, this allows buyers to shop around and force selling firms (focal firm) to compete on price
3) the product is important and/or costly for the buyer
    a. if the product being sold is significant to the buyer, the buyer is more likely to pay close attention to the exchange to help ensure that the lowest possible price is obtained
4) buyers are operating in a competitive industry
    a. if buyers are in a competitive industry they are earning only normal economic profits and therefore are forced to manage costs closely—such buyers threaten a focal firm's ability to earn above normal profits because such buyers simply cannot afford to pay more than a competitive price
5) buyers can vertically integrate backward
    a. if buyers pose a credible threat of becoming a focal firm's competition, they enjoy a more powerful bargaining position
    b. if buyers do not face significant barriers to entry into the industry, they present a threat to the focal firm
6) many small buyers can be united to act as a block
    a. even numerous small buyers can pose a threat if there is some common cause that can unite them, things like boycotts around an issue or aimed at a certain company

► ***Example: Monsanto's European Strategy***

In the late 1990's Monsanto embarked upon a strategy of becoming a life sciences company dedicated to using biotechnology to develop plants that would improve our ability to feed the people of the world. By 1999, Monsanto had spent over $8 billion acquiring smaller biotech companies to help the firm achieve its lofty goals. To fund this impressive growth and pursue the overall strategy, Monsanto began selling off its traditional chemical businesses that had been the backbone of the company.

By early 1998, Wall Street had rewarded Monsanto with a near doubling of its stock price since the strategy began. Robert Shapiro, the CEO and architect of this life sciences strategy, was hailed as a visionary industry leader. He and others in the company repeatedly extolled the virtues of the firm's strategy. In their view, the firm had embarked upon a strategy that would improve the lives of millions of people through the use of biotechnology. Their technologies would help reduce the use of dangerous pesticides and herbicides, improve the nutritional value of foods, allow some common food plants to actually take on medicinal properties, and produce drought tolerant plants that could be grown more effectively in Africa. Everyone seemed to fully support the strategy—from farmers to food processors to U.S. consumers to investors.

Things began to unravel for Monsanto with the introduction of genetically modified soybeans to Europe in the fall of 1996. The European Union had approved the importation of genetically modified foods. What began as questions and concerns soon turned into a public backlash.

Europeans were not inclined to accept genetically modified food sources from a large American company. Several consumer groups soon began to demonize Monsanto for its efforts. Consumers vowed to avoid any products containing genetically modified foods. Soon food processors were promising not to use genetically modified foods in their products. Even large food retailers began claiming that they would not sell genetically modified foods. The zealous avoidance of genetically modified foods spread back across the Atlantic. In time food processors and restaurants in the U.S. were refusing to use genetically modified food sources. Even farmers who had used the genetically modified seeds for several years began refusing to use the seeds any longer.

Within three short years, Monsanto had gone from being the darling of Wall Street to being a pariah. Finally in December of 1999, Monsanto announced its merger with Pharmacia-Upjohn. Monsanto was valued at $23.4 billion of which $23 billion was the value of Monsanto's pharmaceutical division. In other words, the $8 billion of biotech investment Monsanto had made in the previous three or four years was almost worthless. What happened? How could Monsanto's strategy have come apart so rapidly?

The undoing of Monsanto's strategy began with its entry into the European market with its genetically modified soybeans. Apparently, Monsanto had failed to carefully consider the power of buyers in an international market. Buyers quickly united in their opposition to Monsanto's products. Buyers' opposition soon spread throughout Europe and then back to the U.S. Looking back it seems that Monsanto should have been able to detect this threat through a proper external analysis. Perhaps Monsanto's excitement about its technology (which was supported by the stock market) blinded the company to what should have been an obvious threat. In any case, Monsanto's experience highlights the importance of a thorough external analysis, particularly the importance of considering the threat of buyers.

(Michael Watkins, *Robert Shapiro and Monsanto*, HBR Case 9-801-426, Revised 2003).

Slides 2-14 & 2-15

Explain how powerful buyers can reduce profitability by driving the focal firm to lower prices. Students are usually eager to share a favorite Wal-Mart example of buyer power. As with supplier power, focus on the industry characteristics that give rise to buyer power.

Teaching Points

- Emphasize that a focal firm may face a range of buyers, some of whom are powerful and threatening and others of whom are less threatening. Some firms have explicit policies about not becoming too dependent on any one buyer.

- Emphasize that the threat of buyers is also a numbers game. Several large buyers buying from many small sellers (focal firm) will have relatively more bargaining power than the sellers (focal firm).
- Point out that the threat of buyers is not static. Buyers may become more powerful over time because of growth through acquisition and/or natural growth. Alternatively, if more international buyers enter the market the power of buyers could decrease.
- Use the Monsanto example to demonstrate the extremely high cost of failing to do a thorough external analysis. Focus on how international buyers proved the undoing of an otherwise very effective strategy.

Summarizing the Five Forces

At this point it is helpful to provide students with some theoretical perspective on the Five Forces. The following teaching points have been effective in getting students to appreciate what a Five Forces Analysis really tells us and what some of the implications are.

Slide 2-16

Use this slide to help make the teaching points listed below. Emphasize that the Five Forces Model is a tool for assessing likely industry profits.

Teaching Points

- Remind students that the Five Forces Framework is based on economic logic that was originally intended to help policy makers ensure competitive markets.
- Emphasize that these forces are the very forces that make markets competitive. As such, if threats of these forces are high, then we would expect there to be normal economic profits in the industry.
- Point out that the Five Forces Framework is intended to help firms determine if above normal profits are likely to be found in an industry. We would expect possible above normal profits if one or more of these forces were weak in an industry.
- Now take students through the Discussion & Activity below to make them think about the ethical implications of this type of analysis.

Discussion & Activity

Divide the class into groups of 4-5 students. Tell them to assume that they are members of Congress. They sit on a special sub-committee that is hearing testimony from various groups about the patent laws protecting drug manufacturers. Several people representing cancer patients and their families have testified that they face the excruciating choice of buying groceries for their families or the costly drugs for the cancer patient in their family. Two people representing generic drug manufacturers have testified that if the large pharmaceutical firms would license drug patents to them they would charge a much lower price for the drugs, pay a respectable royalty fee, and still make an acceptable profit. A research scientist from the National Institute of

Health has testified that studies show several thousand Americans die each year because of lack of access to these drugs. The same witness testified that the public monies spent on the top 10 cancer drugs in the U.S. could fund cancer blood screening for every first grader in the U.S. each year. Representatives of all the major pharmaceuticals with operations in the U.S. have testified that the costs of developing these cancer drugs are staggering. Several testified that for every blockbuster drug developed by their companies there are almost twenty drugs in which the firm has invested at least $5 million that never make it to market. Each of these industry representatives has offered evidence that when a drug goes off patent profits drop precipitously. They argue that without patent protection firms would never be able to come close to recapturing all the development costs of these new cancer drugs. Finally, a well-known strategic management scholar (insert your name here) has testified that the drug patent laws represent a market imperfection that has been granted by the government. This scholar testified that if the market imperfection were to be removed, theory predicts that any competitive advantage currently enjoyed by the large pharmaceuticals would likely vanish. The final words of this scholar witness were, "It remains to be seen if drug companies would be willing to make the necessary investments in the development of new drugs in the absence of patent protection."

Have the students discuss within their groups the pros and cons of ending patent protection. Ask them what they think of the scholar's concluding words. Invite one or two groups to share highlights of their discussion with the class.

Suggest to students that if they find themselves helping a firm exploit market imperfections they may be pitting the interests of the firm against the interests of consumers. Ask them if consumers benefit from drug patent laws in any way? On the one hand, firms need an incentive to invest in costly research. On the other hand, consumers are forced to pay exorbitant prices for drugs in the presence of patent protection.

A correct answer is elusive. The purpose of this discussion is to help students recognize and reconcile some potential conflict in interests. It has been quite useful to end this discussion by suggesting to students that a good industry analysis will include some consideration about how the actions of the focal firm might affect other constituencies.

Complementors as Another Force

Discuss the role of complementors in analyzing competition within an industry.

Learning Objective 5

Adam Brandenburger and Barry Nalebuff have suggested that another important force that should be considered in industry analysis is that of complementors. Complementors are those firms whose products make the focal firm's products more valuable. For example, the value of Chevrolet's top of the line sports car, the Corvette, is increased by the use of special Goodyear tires that have been designed specifically for the Corvette. This combination is touted in the advertisements of both Chevrolet and Goodyear.

Slide 2-17
Point out that firms would want to actively seek complementors and that those complementors may well come from outside the tradition boundaries of the industry. Complementors will usually have incentives to cooperate with firms.

Complementors are typically found in closely related industries as opposed to the same industry as the focal firm, depending of course, on how industry boundaries are defined. However, whether the complementors are found in the same industry or a closely related industry the focal firm's industry is more attractive if complementors exist.

Important Point: A single firm could be both rival and complementor. Quicken money management software is both a rival and a complementor to Microsoft. Quicken is a complementor in that it designs software to run on Microsoft's Windows, thus making Windows more valuable to customers. It is a rival in that it competes with Microsoft's Money money management software.

Teaching Points

- Ask students to identify potential complementors for a firm that is planning to launch a new line of backpacks. This firm wants to appeal to the student market and the extreme sports market. Ideally they want students to buy their backpacks out of a desire to identify with extreme sports.
- Ask students if any of the complementors could also be competitors.
- Point out to students that the value and chances of success of the new firm's offering is increased by the presence of complementors.
- Emphasize that a good industry analysis will include a consideration of complementors and that those complementors may come from outside the industry—as do substitutes.
- Thus, industry analysis definitely includes a consideration of one or more industries that are related to the industry in which the focal firm operates.

Industry Analysis in Perspective

Up to this point we have focused on how to do an external analysis that has focused mainly on identifying threats. This begs two questions: 1) Is there anything we can do in response to the threats? And, 2) What about opportunities in the external environment?

Responding to Environmental Threats

For most firms there is little the firm can do to actually change the threats that have been described. However, firms can respond by 1) avoiding the industry (choosing not to enter or choosing to exit), or, 2) making strategic choices that may neutralize the threats. Strategic choices that may neutralize threats are typically a matter of changing the incentives of other players—rivals, suppliers, buyers, substitutors, and complementors. In a sense, many of the possible strategic choices consist of basically turning a threat into an opportunity. These choices are treated in more detail later chapters. Several brief examples are offered here.

► ***Examples of Responses to Threats:***

- A regional healthcare system faces a small handful of very powerful national suppliers that have no incentive to offer favorable pricing to a small regional healthcare system. The regional healthcare system forms an alliance with several other regional healthcare systems and thereby increases the bargaining power of all the members of the alliance vis-à-vis the large national suppliers.
- A small building contractor grows rapidly by winning bids to build "big box" retail stores for a large national retailer. In time the small building contractor has become a large building contractor with millions of dollars in investment in the company. This contractor realizes that he has become almost totally dependent on this one retailer. Furthermore, he realizes that his rate of return is less than many of his competitors. He responds by consciously limiting the number of projects he bids on from the national retailer while at the same time beginning to bid on jobs from other retailers. As expected, his rate of return on investment begins to climb.
- A regional bakery (Bakery X) faces intense rivalry from two other bakeries that constantly compete for business with fast food restaurants and small, independent grocery stores. These bakeries do most of their business through brokers who ask for bids on behalf of restaurants and grocers. After a period of particularly intense price competition, Bakery X decides it is time to try to manage the rivalry. When the largest broker approaches Bakery X with a request for bid from a restaurant chain to supply hamburger buns in a neighboring city in which one of the rival bakeries is located, Bakery X provides the broker with a bid. However, the bid is higher than recent history suggests and includes a written statement. The statement explains that Bakery X plans to focus on servicing restaurants and stores in certain selected cities and that it will be forced to charge higher prices in other cities. Bakery X does this knowing that the broker will communicate this odd behavior to the other bakeries. The other bakeries recognize the signal and begin to reciprocate. Price wars are avoided and average profits rise for all three bakeries.

Slide 2-18

Use this slide to make the major point that firms usually can't do anything to change industry dynamics without the help or collusion of other industry players. The examples offered have proven effective in making the point that firms can act, in concert with others, to neutralize or even reverse threats.

Exploiting Environmental Opportunities

Describe four generic industry structures and specific strategic opportunities in those industries. **Learning Objective 6**

As analysts and/or managers perform external analysis on a particular industry, one of several generic industry structures usually becomes apparent. Each of these industry structures presents opportunities that may be exploited. Four of these generic industry structures and opportunities that may be exploited are covered here. A brief description of industry characteristics indicative of each structure is offered along with a description of the opportunities to be exploited.

Slide 2-19

Emphasize that industry structure is something that should be examined as part of any external analysis because of the opportunities that may be available. Point out that some of the same kinds of industry characteristics that we look for in the Five Forces Model also tell us something about industry structure.

1) **Fragmented Industry**
   - <u>Industry Characteristics</u>
     - large number of small firms
     - no dominant firms
     - no dominant technology
     - commodity type products
     - low barriers to entry
     - few, if any, economies of scale
   - <u>Opportunities</u>
     - consolidation
       - buy competitors
       - begin to generate advantages of size and dominance
         - increase minimum efficient scale
         - increase bargaining power vis-à-vis suppliers and buyers
         - *possibly differentiate/brand the product*

Slide 2-20

Point out that consolidation is an opportunity because consolidation typically leads to more coordination among rivals. Competitors usually begin to see that price competition is not in the best interests of the industry—as suggested in the bakery example above.

2) **Emerging Industry**
   - <u>Industry Characteristics</u>
     - new industry based on a break through technology or product
     - no product standard has been reached
     - no dominant firm has emerged
     - new customers are coming from non-consumption not from competitors
   - <u>Opportunities</u>
     - first mover advantages
       - technological leadership—establish the standard with a protectable technology and/or obtain cost advantages due to early learning
       - preemption of strategically valuable assets—lock-up prime locations and/or sources of raw materials
       - create customer-switching costs—require customer investment in your product like learning and infrastructure
     - **important caveat – first mover disadvantages**

- a firm may attempt to establish the first mover advantages listed above and be beaten to the punch by a competitor in which case, the attempt will have proven costly

Slide 2-21

Emphasize that first mover advantages do not automatically accrue to the first firm. The advantages only accrue if the firm can protect the source of advantage. Also, point out that there are risks associated with attempting to gain a first mover advantage. For example, another firm may copy your innovation and become more efficient, thereby gaining an advantage.

3) **Mature Industry**
   - Industry Characteristics
     - slowing growth in demand
     - technology standard has been reached - very stable
     - slowing increases in production capacity
     - decline in the rate of new product introductions
     - increasing international competition
     - industry-wide profits have begun to decline
     - less efficient firms have begun to exit the industry
   - Opportunities
     - refining current products—offering new and improved versions of the product
     - improving service—offering higher levels of service with essentially the same product
     - process innovation—refining manufacturing and distribution processes to capture incremental profits

Slide 2-22

Explain that the opportunities to be exploited in a mature industry are primarily a matter of doing what the firm has always done—only better. The firm can gain an advantage only if it is able to make these improvements relatively better than competitors.

4) **Declining Industry**
   - Industry Characteristics
     - total industry sales have shown a pattern of decline over several years
     - some well established firms have exited the industry
     - many firms have discontinued maintenance investment
   - Opportunities
     - become a market leader—initiate consolidation in order to orchestrate a reduction in industry capacity
     - finding a niche—focusing on a small segment of the market that is not being served by other competitors
     - begin a harvest strategy—discontinue investment in maintenance, reducing product line breadth, lowering quality and service, making what profits are available with a minimum of effort

- divesting the business—simply selling off the business either at the first sign of decline or after the firm has 'harvested' for a while

Slide 2-23

Explain that a firm must decide which of the opportunities listed is most likely to produce above normal profits for the firm. Some firms will fare better with a quick exit from a declining industry and other firms can remain quite profitable by pursuing one of the other opportunities listed.

Teaching Points

- Reemphasize that most firms are not powerful enough to actually change the threats faced in an industry.
- Emphasize that firms can take actions to neutralize threats, perhaps even turn them into opportunities—use the three examples above.
- Explain that the generic industry structure of an industry should be established as part of the external analysis process. Students should be able to identify facts about an industry so that they could classify the industry's generic structure. Industries usually move from one structure to another in a lifecycle, although some industries may stay at a structure stage for many years.
- Point out that firms may respond to the opportunities presented by industry structure.
- Some firms may simply choose to exit the industry at the first sign of falling profitability. This may occur for some firms in an emerging structure when the firm realizes that it is losing a technology race. It may occur for other firms much later during the declining structure stage.
- Other firms may stay in the industry and attempt to exploit opportunities throughout the lifecycle.

SUMMARY OF EXTERNAL ANALYSIS

Slide 2-24

Use this slide to remind students of the overall model. Mention that elements of the general environment may affect other elements. Both the general environment and the industry environment may present threats and/or opportunities, although the industry environment has a more direct effect on firm performance.

External analysis is a necessary precursor to strategic choice. Firms must understand the external environment in which they operate before they can make effective strategic choices.

Analysis of the general external environment helps firms identify conditions and trends that may create threats and opportunities. Each of the six elements of the general external environment should be considered even though it may be the case that no relevant conditions or trends are discovered in some of the elements.

The Five Forces Framework helps firms determine whether an industry is so competitive that no above normal profits are likely in the industry. This framework also helps identify the forces in the industry that are most threatening to above normal profits. These forces are: the threat of entry, the threat of rivalry, the threat of substitutes, the threat of suppliers, and the threat of buyers. This framework can also be applied in international settings. Foreign governments often affect the threat of entry. Complementors are another force that should be considered in analyzing an industry. The value of the focal firm's product is increased by the presence of complementors. Complementors often come from outside the industry in which the focal firm operates, suggesting that firms should be careful to look at related industries.

The structure of an industry suggests opportunities that may be exploited. Fragmented industries, emerging industries, mature industries, and declining industries each present opportunities to which firms may respond.

Opportunities are also available to firms because of industry characteristics of international markets. Firms may respond to these characteristics with a multinational approach, a global approach, or a transnational approach. Each of these structural approaches is designed to exploit opportunities suggested by the respective industry characteristics.

Firms can use the information generated from external analysis to make strategic choices that may have the effect of neutralizing threats, exploiting opportunities, or some combination of the two. One of the greatest benefits of external environment analysis is that firms can become aware of environmental threats before committing to a strategic course of action. Rather than learning of threats after firm resources are committed, firms that engage in external environment analysis can anticipate such threats and thereby increase the probability of enjoying above normal returns.

Teaching Points

- Emphasize that there is an important economic logic behind external analysis—we are looking for the degree to which an industry is competitive so that we can determine if above normal profits are likely.
- Emphasize the notion and benefit of being able to assess threats and opportunities before being locked-in to a strategic course of action.
- Point out that external environment analysis takes time and effort. It requires a disciplined approach. What we have presented here is the ideal. Not every firm engages in this analysis. Thus, firms that do engage in environmental analysis may realize a competitive advantage.
- Remind students of the *Discussion & Activity* which suggested that there is an ethical element involved in exploiting market imperfections. Encourage students to be mindful of stepping over the ethical line.
- Explain that students may benefit from applying these concepts in their own lives and careers. It is always helpful to look around and be mindful of the environments in which we operate professionally and personally.

Slide 2-25

Use this slide to make your concluding comments. The teaching points above can be worked into your conclusion. Refer to the Monsanto example and remind students of the importance of thorough external analysis. One effective way to wrap up the session is to refer back to the free extreme adventure trip discussion from the beginning of the session. Remind students that such a trip could be an extremely fun trip or an extremely miserable trip depending on how they packed. Knowing what to pack would make all the difference. And, knowing what to pack is simply a matter of external analysis. The success or failure of firms is likewise, often a matter of effective versus ineffective (or non-existent) external analysis.

CHALLENGE QUESTIONS

1. Your former college roommate calls you and asks to borrow $10,000 so that he can open a pizza restaurant in his hometown. In justifying this request, he argues that there must be significant demand for pizza and other fast food in his hometown because there are lots of such restaurants already there and three or four new ones are opening each month. He also argues that demand for convenience food will continue to increase and he points to the large number of firms that now sell frozen dinners in grocery stores. Will you lend him the money? Why or why not?

   No, you would not want to lend him the money. This sounds like an industry in which the threat of rivalry will be high. The numerous restaurants will have incentive to compete vigorously to survive in this environment. There will likely be a high threat of substitutes given the number of firms selling frozen dinners. These conditions suggest that there will be no above normal profits in this market.

2. According to the five forces model, one potential threat in an industry is buyers. Yet unless buyers are satisfied, they are likely to look for satisfaction elsewhere. Can the fact that buyers can be threats be reconciled with the need to satisfy buyers?

   Yes it can. If buyers are powerful as explained in the Five Forces Framework a firm cannot afford to simply let buyers be satisfied by competitors. A firm would quickly run out of buyers if it did not strive to satisfy at least some buyers. Powerful buyers will try to gain their satisfaction by encouraging the firms from whom they buy to compete against each other. Of course, if a firm cannot satisfy buyers and make at least a normal economic profit, the firm should probably exit the market.

3. Government policies can have a significant impact on the average profitability of firms in an industry. Government, however, is not included as a potential threat in the five forces model. Should the model be expanded to include government (to make a "six forces" model)? If yes, why? If no, why not?

   No, because the forces that governments can exert on an industry can be considered in the forces that are already part of the model. For example, governments can affect the threat of entry through tariffs, etc. Governments can affect the threat of rivalry by granting monopolies. Governments can affect the threat of suppliers and buyers through anti-trust policies. Notice that government policies can also present opportunities for firms. Import policies may make an industry more attractive by erecting entry barriers.

4. How would you add complementors to the five forces model? In particular, if an industry has large numbers of complementors, does that make it a more attractive industry, a less attractive industry, or does it have no impact at all on the attractiveness of an industry? Justify your answer.

   The Five Forces Model is an industry analysis model. Because complementors often come from outside an industry it would be best not to include complementors as a formal part of the model. In those instances when rival firms are also complementors it is usually because the rival firm has operations outside the industry. From the perspective of the focal firm the number of complementors available to firms within an industry is not as important as which firms in the industry benefit from the complementors. Complementors may benefit some firms within an industry while not benefiting others. If a complementor benefits a rival more than it benefits the focal firm, the complementor could actually be considered a threat, making the industry less attractive. Therefore it is difficult to argue that more complementors are automatically better or worse.

5. Opportunities analysis seems to suggest that there are strategic opportunities in almost any industry—even declining industries. If that is true, is it fair to say that there is really so such thing as an unattractive industry? If yes, what implications does this have for the five forces model? If no, describe an industry that has no opportunities.

   The most accurate characterization would be that there are opportunities even in unattractive industries for some firms. Unattractive industries, by definition, offer little hope of above normal profits because of intense competition among firms. However, if a firm is able to overcome that competition through some competitive advantage a firm may earn above normal returns in an unattractive industry. The airline industry is considered unattractive yet Southwest Airlines has consistently bested industry averages over almost three decades.

6. Is the evolution of industry structure from an emerging industry to a mature industry to a declining industry inevitable? Why or why not?

   Most of history would suggest that such evolution is inevitable. However some industries seem to have remained mature industries for a very long time. Industries that have gone through the complete cycle have done so primarily due to technological change. That is to say, new technologies have displaced old technologies and human 'needs' have changed in response. Automobiles have replaced horse-drawn buggies and humans no longer 'need' horse-drawn buggies. On the other hand the packaged foods industry has been around for a long time. Henry Heinz began processing and packaging and branding condiments well over a century ago. This industry is still in the mature stage even though processing and packaging technologies have advanced considerably. It is difficult to imagine that humans will ever stop 'needing' packaged foods. Thus, the answer seems to be: it depends on the interaction of technology and human 'needs'.

Problem Set

1. Perform a five forces analysis on the following two industries:

The Pharmaceutical Industry

The pharmaceutical industry consists of firms that develop, patent, and distribute drugs. Although there are not significant production economies in this industry, there are important economies in research and development. Product differentiation exists as well, because firms often sell branded products. Firms compete in research and development. However, once a product is developed and patented, competition is significantly reduced. Recently, the increased availability of generic, non-branded drugs has threatened the profitability of some drug lines. Once an effective drug is developed, there are usually few, if any, alternatives to that drug. Drugs are manufactured from commodity chemicals usually available from numerous suppliers. Major customers include doctors and patients. Recently, increased costs have led the federal government and insurance companies to pressure drug companies to reduce their prices.

The Textile Industry

The textile industry consists of firms that manufacture and distribute fabrics for use in clothing, furniture, carpeting, and so forth. Several firms have invested heavily in sophisticated manufacturing technology, and many lower-cost firms located in Asia have begun fabric production. Textiles are not branded products. Recently, tariffs on some imported textiles have been implemented. There are numerous firms in this industry; the largest have less than 10 percent market share. Traditional fabric materials (such as cotton and wool) have recently been threatened by the development of alternative chemical-based materials (such as nylon and rayon) although many textile companies have begun manufacturing with these new materials as well. Most raw materials are widely available, although some synthetic products may be periodically in short supply. There are numerous textile customers, but textile costs are usually a large percentage of their final product's total costs. Many users shop around the world for the low prices on textiles.

2. Perform an opportunities analysis on the following industries:

The U.S. Airline Industry. Since the tragedies of 9-11, the U.S. airline industry has seen a consistent drop off in sales. This has forced many U.S. airline companies to have to cut back their employment, and several—including USAir and United—have had to declare bankruptcy.

The U.S. beer industry is dominated by three companies: Anheuser-Busch, the Miller Brewing Company, and Adolph Coors. In addition, there are several regional brewers and a large number of very small microbrewers that manufacture and sell beer in small quantities.

There are over 3,000 property and automobile insurance companies in the U.S. The larges companies, including Geico, Progressive, Allstate, and Safeco, control less than 20% of the property and automobile market.

Portable memory chips—sometimes worn around the neck like a necklace—may be an important substitute for floppy discs. These memory chips come in various sizes (from 64K to 256K) and range in price from $6 to $150. They plug into a computer's USB port, self load, and act like another hard drive in your computer.

In 2003, the German firm DHL acquired the U.S. firm Airborne Express, to become the third largest player in the small package delivery business—behind UPS and FedEx. Shipments overseas continue to be a growing part of this industry.

3. For each of the following firms, identify at least two competitors (either rivals, new entrants, or substitutes) and two complementors.
   Yahoo
   Microsoft
   Dell
   Boeing
   McDonald's

Answer 1

The Pharmaceutical Industry

a. The threat of entry: New entrants are firms that have either recently begun operations in an industry or that threaten to begin operations in an industry soon. The Pharmaceutical Industry had not seen many new entrants. Barriers to entry are significant given the emphasis on research and development. Costs are very high in this area. With significant barriers to entry in place, potential entrants will not enter into an industry even though incumbent firms are earning competitive advantages. There are four important barriers to entry that students could use to discuss the relative "height" of barriers to entry. These include: (1) economies of scale; (2) product differentiation; (3) cost advantages independent of scale; and (4) government regulation of entry.

b. The threat of rivalry: Rivalry is the intensity of competition among a firm's direct competitors. The attributes of an industry that increase the threat of rivalry include: (1) large number of competing firms that are roughly the same size; (2) slow industry growth; (3) lack of product differentiation; and (4) capacity added in large increments. For the pharmaceutical industry, there are relatively few large major drug companies. Industry growth is fairly strong. There is substantial product differentiation; and capacity is not added in large increments. Thus, the threat of rivalry

c. The threat of substitutes: The products provided by a firm's rivals meet approximately the same customer needs in the same ways at the products provided by the firm itself. Substitutes meet approximately the same customer needs but do so in different ways. Generic drugs would be considered substitutes in the pharmaceutical industry. These substitutes place a ceiling on the prices firms can charge and on the profits that they can earn.

d. The threat of suppliers: Suppliers can threaten the performance o firms in an industry by increasing the price of their supplies or by reducing the quality. There are indicators of the threat of suppliers in an industry. These include: (1) suppliers' industry dominated by small number of firms; (2) suppliers sell unique or highly differentiated products; (3) suppliers are not threatened by substitutes; (4) suppliers threaten forward vertical integration; (5) firms are not important customers for suppliers. The pharmaceutical industry is somewhat immune to these threats given that the raw materials (chemicals) are commodities and available through a number of suppliers.

e. The threat of buyers: Indicators of the threat of buyers in an industry include: (1) number of buyers is small; (2) products sold are undifferentiated and standard; (3) products are significant percentage of a buyer's final costs; (4) buyers are not earning significant economic profits; (5) buyers threaten backward vertical integration. The pressure that large high-volume retailers can exert may be a factor (e.g. Wal-Mart and other big box retailers that have pharmacy outlets). However, overall the threat of buyers is rather small.

The Textile Industry

a. The threat of entry into this industry is high. No one textile manufacturer has more than 10 percent of the market share. There is relatively little product differentiation as raw materials are widely available. There are few cost advantages available. There is virtually no government regulation into this industry and there are many manufacturers around the world.

b. The threat of rivalry. There are numerous manufacturers in the textile industry and therefore competition is high; consumers shop for best price worldwide. There is relatively slow growth in the industry. There is little differentiation; materials are either natural or synthetics. Capacity can be added fairly easily as can be seen with the increasing number of manufacturers in Asian countries.

c. The threat of substitutes: There are very few substitutes except for synthetics. However, most firms in this industry are capable of manufacturing with the synthetics if they are available.

d. The threat of suppliers: The raw materials are fairly standard (wool or cotton) with some challenges associated with synthetics. There are currently no substitutes other than those mentioned above.

e. The threat of buyers: The number of buyers is fairly large except that they are very price sensitive. Products that are sold are undifferentiated and are not branded therefore there are many alternatives.

Answer 2

U.S. Airline Industry: Is a mature industry. Opportunities may exist by a greater emphasis on refining a firm's current products, increasing the quality of service, and a focus on reducing costs.

U.S. Beer Industry: Could be considered a mature industry (although some students may argue that it is a fragmented industry). The domination of the industry by the three companies requires the development of experienced repeat customers for both the large firms and the smaller regional and microbrewers. Here the opportunities may be found in refining current products. Process innovation may also represent an opportunity where there is an effort to refine and improve the firm's current processes.

Automobile Insurance Companies: Could be considered a fragmented industry. Large numbers of small or medium sized firms operate and no small set of firms has dominant market share. The major opportunity is the implementation of consolidation strategies.

Portable Memory Chips: Emerging industry. This is characterized by technological innovations. First-mover advantages should be considered. Firms can establish first-mover advantage through technological leadership, preemption of strategically valuable assets, and the creation of customer switching costs. In this market, technological leadership strategies should be employed.
Small Package Delivery Business: Opportunities in an International Context.. There is an increase in the amount of international customers and firms should pursue multinational opportunities and the development of experienced repeat customers. Here there should be an emphasis on refining current products and an emphasis on service.

Answer 3

a. Yahoo – Competitors: (1) MSN; (2) AOL. Complementors (1) Google, (2) Netscape

Microsoft – Competitors: (1) Red Hat Linux; (2) Sun Microsystems. Complementors (1) Java; (2) Adobe

Dell: -- Competitors: (1) HP; (2) Gateway. Complementors: (1) Canon printers; (2) Intel

Boeing: -- (1) Airbus; (2) Pratt Whitney. Complementors: (1) Rolls Royce Engines; (2) GE engines.

McDonald's: -- (1) Burger King; (2) Wendy's.