Solutions for Strategic Management and Competitive Advantage Concepts and Cases 6th Edition by Barney

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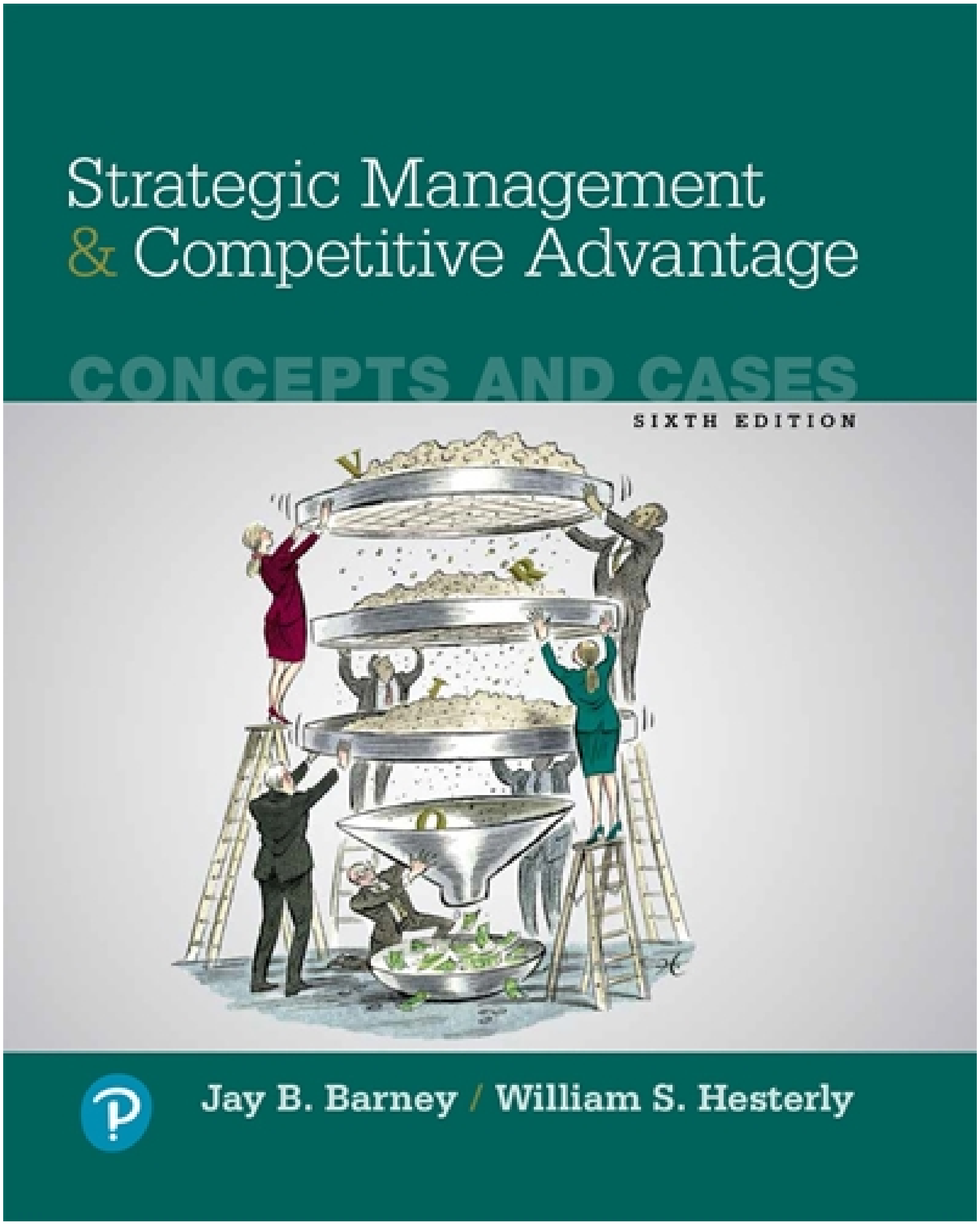


Solutions

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 2.1

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 students 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 the trend or condition may present:

Technological Change

Increased preference of customers to listen to music in the digital format
Opportunity: Firms such as Pandora and Spotify can make headway in the market for Internet-based radio.
Threat: A firm such as Pandora pays a very high royalty rate because Internet-based radio is seen as a new format for which old royalty rates applicable to traditional radio stations are no longer valid.

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 SUVs 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 SUVs are beginning to see sales of their high margin SUVs 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 SUVs and trucks which may result in plant closures, etc.

Industry Environment

Learning Objective 2.2

Describe How the Structure-Conduct-Performance (S-C-P) Model 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.

The S-C-P (Structure, Conduct, Performance) 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. Scholars have developed models of environmental threats based on the S-C-P model that are highly applicable in identifying threats facing a particular firm.

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 model of environmental threats 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 environmental threats model. After going through the model, the questions posed in the Discussion & Activity box usually lead to a good discussion of the ethics of strategy.

The Environmental Threats Model

Learning Objective 2.3

Describe the Five Environmental Threats and Indicators of When Each of These Threats Will Enhance 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 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 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: An analysis of environmental threats 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 common environmental threats are:

- the threat from new competition
- the threat from competition among existing competitors
- the threat from superior or low-cost substitutes
- the threat of supplier leverage
- the threat from buyers' influence

These five threats 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 threats 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 threats.

Important Point: The 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 being 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 From New Competition. 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 new competition 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 of 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—it would be that the 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 regulation of entry
    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 these slides 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 from Existing Competitors. The threat from existing competitors 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 prices 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) 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
4) 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.

Threat of Substitute Products. 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 firm's product, then customers may switch because of relatively small price differences.
2) Almost by definition, recognizing substitutes may require looking outside the focal firm's 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 firm's current radar map. They may need to look in unexpected places to spot the substitutes that matter.

Threat of supplier leverage. 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 are 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 from buyers' influence. 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

► ***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. In 2017, Bayer announced that they were buying Monsanto.
(Michael Watkins, *Robert Shapiro and Monsanto*, HBR Case 9-801-426, Revised 2017).

Slides 2-14 and 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 Environmental Threats Model

At this point it is helpful to provide students with some theoretical perspective on the environmental threats model. The following teaching points have been effective in getting students to appreciate what the 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 model is a tool for assessing likely industry profits.

Teaching Points

- Remind students that the environmental threats model is based on economic logic that was originally intended to help policy makers ensure competitive markets.
- Emphasize that these threats are the very factors that make markets competitive. As such, if threats of these factors are high, then we would expect there to be normal economic profits in the industry.
- Point out that the model 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 threats 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 Complements in Analyzing Competition Within an Industry

Learning Objective 2.4

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 traditional 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 in 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 a bid for 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 2.5

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 environmental threats 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 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 model of environmental threats 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 factors in the industry that are most threatening to above normal profits. These factors are: threat from new competition, threat from competition among existing competitors, threat from superior or low-cost substitutes, threat of supplier leverage, and threats from buyers' influence. 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 when 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

2.1. 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. What are the risks involved in choosing to lend him money?

> 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.

2.2. One potential threat in an industry is buyers' influence. 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 environmental threats model, 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.

2.3. 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. Why should the model be expanded to include government? Why or why not?

> No, because the forces 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.

2.4. If an industry has large numbers of complementors, does that make it more attractive, or less attractive, or does it have no impact at all on the industry's attractiveness? Justify your answer.

The model of environmental threats 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.

2.5. Opportunities analysis seems to suggest that there are strategic opportunities in almost any industry, including declining ones. If that is true, is it fair to say that there is really no such thing as an unattractive industry?

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.

2.6. If there is really no such thing as an unattractive industry, what implications does this have for the applicability of environmental threat analysis?

As indicated above, there are opportunities even in unattractive industries, as the Southwest Airlines example points out. In such industries, an analysis of environmental threats would help firms use the S-C-P model to their advantage by understanding the industry's structure that would identify strategic choices available to them.

2.7. Describe an industry that has no opportunities.

This would be an industry that would be ideal from a public policy perspective because such an industry would exhibit perfect competition with firms reporting average profits.

2.8. Describe when the evolution of industry structure from an emerging industry to a mature industry to a declining industry is inevitable.

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

2.9 Perform an analysis of the profit potential on the following two industries:

The Pharmaceutical Industry

The pharmaceutical industry consists of firms that develop, patent, and distribute drugs. Although this industry does not have significant production economies, it does have 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, few, if any, alternatives to that drug are available. Drugs are manufactured from commodity chemicals that are 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 Pharmaceutical Distribution Industry

The pharmaceutical distribution industry consists of firms that buy drugs from pharmaceutical firms and then sell and distribute those drugs to retail drug stores, hospitals, and to hundreds of thousands of other outlets where drugs are sold to consumers. Because the marginal cost of pushing another drug through a firm's established distribution network is almost zero, there are substantial economies of scale in this industry. Historically, there were over 350 pharmaceutical distribution firms. Through a series of acquisitions, this industry is currently dominated by three firms with over 95 percent of the total market share. Competition among these firms can be fierce – firms have sometimes set their prices below their marginal costs to retain contacts with pharmaceutical firms (on the supply side) and consolidating retail drug stores (on the demand side). Despite the high cost of some pharmaceuticals, they are often a less costly alternative to surgery and more invasive procedures often performed in hospitals.

2.10 Perform an opportunities analysis on the following industries:

(a) The U.S. Airline Industry

(b) The U.S. beer industry

(c) The U.S. property and casualty insurance industry

(d) The worldwide portable digital media (e.g., flash drives) industry

(e) The worldwide small-package overnight delivery industry

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

Answer 2.9

The Pharmaceutical Industry

a. Threat from new competition: 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. Threat from competition among existing competitors: 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 is low.

c. Threat from superior or low-cost substitutes: The products provided by a firm's rivals meet approximately the same customer needs in the same ways as 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. Threat of supplier leverage: Suppliers can threaten the performance of 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 a 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 are available through a number of suppliers.

e. Threat from buyers' influence: 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 Pharmaceutical Distribution Industry

a. The threat of new competition is low: The three leading companies account
for over 95 percent of the market share. Economies of scale give significant cost advantages to incumbents.

b. Threat from competition among existing companies: Fierce price-based competition exists because of consolidation at the demand side and the need to maintain relationship at the supply side.

c. Threat from superior or low-cost substitutes: There are very few substitutes for prescription drugs. The options (surgery, etc.) are more expensive and/or more invasive.

d. Threat of supplier leverage: For a specific ailment, there are not a number of alternatives; this gives the bargaining power advantage to the pharmaceutical firms that supply drugs to the distributors.

e. Threat from buyers' influence: The number of buyers is fairly large except that are large chains that account for a significant volume. Products that are sold are differentiated and are branded; therefore, there are not many alternatives.

Answer 2.10

U.S. Airline Industry: Is a mature industry. Opportunities may exist by putting a greater emphasis on refining a firm's current products, increasing the quality of service, and focusing 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 two 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 2.11

a. Ford – Competitors: (1) GM; (2) Toyota. Complementors (1) Exxon (2) Mobil.
Microsoft – Competitors: (1) Red Hat Linux; (2) Sun Microsystems. Complementors (1) Java; (2) Adobe.
Dell: – Competitors: (1) HP; (2) Lenovo. 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.

McDonald's: Comeback in the U.S. Burger Market: Teaching Note

Objectives and Position in the Course

McDonald's is a short case that does not provide the comprehensive background and numerical support for a quantitative analysis. I will generally not assign it for written case analyses, and I have not used it for an 80-minute session, but it does work well for a lengthy class discussion in conjunction with a discussion of the challenges of a low-cost strategy. The case highlights a crucial strategic dilemma that the company faces and that often confronts companies that compete on lower cost. Sales have been declining and McDonald's faces an important challenge in its core business of hamburgers. A number of smaller but fast-growing competitors have been offering burgers with fresh beef that are perceived as better tasting. McDonald's is trying a number of things to respond (menu tweaks, kiosk ordering, delivery), but its decision of how to respond to better tasting burgers is much more fundamental. If it goes with fresh beef and fresher hamburgers, what changes in its value chain will such a move require? And, what will such changes do to its cost structure?

Teaching Outline

<u>Discussion of McDonald's Current Strategic Position</u>

1. How many of you have eaten at McDonald's in the last month? How many of you have eaten a burger at McDonald's in the last month? Why is your generation turning away from McDonald's?

    This discussion will likely highlight that McDonald's is not nearly as preferred for fast-food by current students as it was for previous generations. A number of reasons will come out of this discussion for why that is the case.

2. How does an industry analysis help us to understand McDonald's challenges?

   The number of upstarts in the industry suggest that entry barriers are quite low for local and even some regional competitors. National-level competition is much more difficult and McDonald's dominates as an international competitor. In every U.S. market, however, it faces competition from local competitors (Is there any U.S. metropolitan area that does not have a popular local chain?) as well as from the growing chains such as Five Guys, Habit, Smashburger, In-N-Out etc.

   Substitutes is a central concern as customers have many other dining options. In-home dining has reached its highest point in decades.

   Rivalry is somewhat nuanced and students will likely take different positions here with some arguing that the growing number of competitors suggests high rivalry. Others will point out that price competition, while not unheard of, does not predominate.

   There is little to suggest that concentration is an issue with either buyers or suppliers.

3. Why are these changes occurring now?

   The most fundamental changes seem to be based on broad-based demographic and cultural changes. The discussion in question 1 will likely suggest that millennials are more discriminating about food and dining experiences. Some may also point out that government-driven changes like the increase in minimum wage in several cities may create greater pressure on a low-cost competitor.

4. What is McDonald's strategy in burgers? What resources and capabilities has it developed in support of that strategy? What is your assessment of the VRIO framework for McDonald's?

   Most students will quickly note McDonald's scale, geographic penetration, brand name, and reputation for consistency. Some classes will need a bit more prodding to understand that optimization and coordination of its value chain to achieve low costs and consistency is remarkable for a company of its scale. It is also not easy to generate the organization capabilities to produce such consistency on a global scale.

5. What are its advantages and disadvantages relative to competitors such as Five Guys, Smashburger, In-N-Out, etc?

   To some extent, many of McDonald's advantages are a two-edged sword. One can argue that its scale, consistency, and tight coordination across the value chain are difficult to imitate, but they also make it more challenging for McDonald's to make the dramatic changes that changing its competitive model might require. Even its brand has both a positive and negative side to it. On the positive side, customers throughout the world recognize McDonald's and have a clear idea of what to expect from a visit to McDonald's. McDonald's delivers a consistent, low-cost product and does it much faster than most of its competitors. On the other hand, if McDonald's wants to change those perceptions, it would have to overcome tremendous inertia in customer perceptions.

6. Why is its strategy not working as well now?

   At this point in the class discussion, I want to quickly summarize the students' analysis of McDonald's situation before moving forward with what the company should do moving forward.

What should McDonald's Do Going Forward?

My goal in this section of the discussion is not to reach convergence or identify the "right" answer as to what McDonald's should do. Instead, I push students to identify and develop arguments for different strategies. At this point, there is no definitive answer as to what McDonald's should do. It is the ability to identify and strategically reason about those alternatives that matter. Fundamentally, McDonald's can respond to competitors by moving to fresh beef and customizing burgers more. This will inevitably water down some of its current advantages, which could leave the company "stuck in the middle." And, it may severely affect its enormous drive-through business in the U.S. On the other hand, if its maintains its current position, it might continue to see market preferences move away from its consistent, predictable, and low-cost offerings.

1. What are McDonald's strategic alternatives?

2. What are the risks of an aggressive response to fresher, better tasting, more customized burgers? How much additional cost would McDonald's have to incur to make customers switch from Five Guy's?

3. What are the risks of maintaining its status quo?

4. What should McDonald's do?

Levi's Personal Pair

Teaching Note

This case describes Levi's attempt at mass customization. Caught in the middle between low-price competitors and premium priced designer jeans, Levi's considers a proposal for customized jeans that they hope will help them regain a differentiation edge. This is a short case and can be used as a short (30 minutes) discussion in tandem with a lecture, or, because students will usually be very familiar with the industry and it presents some quantitative tasks, the case can also work in an 80 minute block.

Objectives

1. Students gain experience in analyzing a company's differentiation advantage.
2. Students will assess the potential threats to differentiation, particularly those that come from low-price competitors and those from more differentiated competitors.
3. Students gain experience in quantifying the costs and benefits of differentiation.

Study Questions

1. Assess Levi's situation at the time of the case. What is at the root of their problems in the denim market?
2. How does Levi Strauss create value for its customers?
3. Assess the Personal Pair Proposal. What is your evaluation of it from a quantitative perspective? What is your evaluation of it using the VRIO framework?
4. What is your recommendation concerning the Personal Pair proposal?

<u>How does Levi Strauss create value for its customers?</u>
There are multiple answers to this question. Certainly, people buy Levi's for different and multiple reasons. Some of these include:

- Function
- Fit
- Style / Image / Fashion

It may help to motivate the discussion to ask students why they buy jeans. I will usually single out four students (two men and two women) and ask them why they bought their last pair of jeans or why they chose one brand over another. Generally, the conclusion we reach is that there is substantial diversity among jean buyers, but that style and fit are very important criteria to some.

<u>What is Levi's situation in denims at the time of the case?</u>
Levi's is facing dual pressures. On the one hand, they are facing more aggressive price competition, or as the case notes "fierce competition for market share and narrowing margins." For the most part, those competitors challenging on price very likely have lower costs given their reliance on off-shore production. The second challenge Levi's

faces is at the high end as a different set of competitors has challenged them on fashion and image.

Evaluation of the Personal Pair Proposal

How should we evaluate a proposal like the one for Personal Pair?
I like to start the evaluation of the Personal Pair proposal with this question because students have a tendency to just dive in and answer a question before they really think about how they should approach it. Some of the key points that should come out in this discussion include:

- Will customers pay more for Personal Pairs?
- Will any additional premium justify the incremental costs incurred?
- Can Levi's execute the strategy?
- If Levi's is successful will competitors imitate?

What is your assessment of the Personal Pair proposal?

How much will men and women be willing to pay for the Personal Pair? Is a $10-15 premium realistic?
There is no good data in the case to address this question, but many of the students will have well-informed opinions about how much women, particularly, will value a better fitting jean and how much they will be willing to pay.

What are the costs involved in providing Personal Pair jeans?
At this point, I like to go through the different estimates of the proposal with the class. I push them to offer the best, worst, and most likely case scenarios. Exhibit 1 provides Professor Coff's quantitative assessment of the Personal Pair proposal. When I feel that the class is running out of steam in providing their own analysis, I will present his numbers. The best and most likely cases promise high returns while the worst case does not meet most thresholds for new investments. This is often the outcome of analyses that produce optimistic, pessimistic, and realistic scenarios.

Can Levi's execute the strategy? Do they have the needed capabilities?
From the case, it appears that Levi's has most of the capabilities that it needs. They will have to adopt some new flexible manufacturing techniques, but CCTC and FedEx provide many of the important capabilities. The technology involved, which relies on Lotus Notes for much of the information that is transmitted from the kiosk to the factory, is not likely that sophisticated or firm-specific. There are questions around the integration needed to implement Personal Pair and whether Levi's can do this, but in theory at least, much of the integration is accomplished electronically.

Is the strategy imitable?
At least some of Levi's competitors should be able to imitate the strategy if it is successful. Consider the different elements of the strategy. As the table below shows, most are imitable.

Exhibit 1

Element	Imitable	Notes
Kiosks	Yes	Some large competitors may have a substantial advantage given their larger number of retail stores.
EDI link to manufacturing	Yes	EDI is maturing as a technology and is available in off-the-shelf solutions.
Raw materials and logistics	Yes	Raw materials do not change and third parties provide much of the logistics.
Flexible manufacturing of jeans	?	Levi's may have access to a more capable workforce in manufacturing. However, it is not clear how long it takes or how difficult it is to adopt the flexible practices.
Shipping jeans	Yes	Much of the shipping and outbound logistics are provided by FedEx.

Indeed, the fundamental dilemma that Levi's faces is that if it is relatively easy for them to enter the Personal Pair niche, then it should be relatively easy for its competitors that possess similar resources and capabilities compared to Levi's.

<u>How would you summarize the prospects of the Personal Pair proposal? Does it solve Levi's problem?</u>
At first glance, Personal Pairs promise Levi's lower costs at the same time they provide a price premium. Thus, the proposal has the potential to address the fundamental competitive problems facing the company. However, it assumes that people will change the way that they buy jeans and will pay a significant premium even though they will have to wait a significant period of time for their jeans to arrive. Additionally, one can argue that there is a significant imitation threat since Levi's does not appear to be leveraging any unique resources or capabilities (others have retail stores, manufacturing capability, etc.). Thus, if Levi's can do it, then its large competitors probably can as well.

Conclusion

Levi's did implement the Personal Pair proposal in selected outlets. Levi's acquired CCTC for $15 million. Operational problems plagued the implementation as costs were higher than anticipated and integration was difficult to achieve. Moreover, customers showed only a limited willingness to pay a premium. Not long after the introduction of the Personal Pair, Lands' End introduced a mass customization project. The former CCTC head was a key part of the Lands' End team.

This case highlights the danger of relying on quantitative analysis alone to make decisions. Almost any proposal can look good in a spreadsheet with the right assumptions. The case also highlights that it is not enough to come up with something different to maintain a differentiation advantage – a firm has to offer something different for which customers will pay a premium. Finally, there are some secondary issues. For example, Levi's entered the market based on CCTC's promises about costs and benefits. CCTC had an incentive to make the proposed JV look as good possible in order to promote the JV.

Exhibit 2: Analysis of Levi's Personal Pair Opportunity

	Worst Case	Most Likely	Best Case	Notes
Operations per pair				
Gross Revenue	$55	$60	$65	Price premium ranging from $5-$15/pair
Less Allowances	($5)	($2)	$0	Perhaps some allowances for returned product
Net Revenue	$50	$58	$65	
Costs:				
Cotton	$7	$6	$5	Same material but may be more scrap
Mfg. Conversion	$10	$8	$5	Allow for up to double the mfg costs for the new process
Distribution	$2	$1	$0	FedEx paid by customer but some coordination required
Total COGS	$19	$15	$10	
Gross Margin	$31	$44	$55	
SG&A	$27	$23	$17	$17-27 Range =$9 for Levi's + ($10 retail ops * 50% repeat sales) + $3 for CCTC = $17; $10 for additional sales & marketing.
Profit before tax	$4	$21	$38	Profit is $3/pr in the current OLS channel and $2/pr wholesale
Profit margin (%)	7%	34%	58%	
Investment per pair				
Inventory	$5	$3	$1	Variance in raw material inventories + kiosk inventory
Less A/P				Probably insignificant
Accts Receivable	$0	($1)	($2)	Customers pay at time of order & wait < 3 weeks
Factory PP&E	$10	$8	$5	Range from minimal change to doubled
Retail Store	$7	$7	$7	Assumes kiosk is about ⅓ of retail store size
Initial integration	$20	$15	$10	$3M over 3 yrs - volume range from 50,000-100,000 pairs/yr
CCTC IT Investment	$20	$15	$10	CCTC investment range 10-20 (unanticipated contingencies)
Total Investment	$62	$47	$31	
Pre-tax Return on invested capital	6%	44%	123 %	ROIC is currently 8% for OLS and 15% for wholesale channel

Papa John's International Inc.

Teaching Note

Introduction

Papa John's operated in the highly competitive pizza restaurant market. In 2007 the company had sales of $2.0 billion in the $13.50 billion pizza market. The company operated 2,600 locations in the US and had another 500 international locations. However, the U.S. economy had changed over the two decades that Papa John's had been in business. An aging population and a severe economic crisis faced the nation starting in 2008. This impacted Papa John's growth and profitability – though Papa John's was profitable it was enjoying only incremental growth in the 21st century. Despite the challenges, the leadership at Papa John's believed that the company had developed some important advantages that could be leveraged for high growth in either the U.S. or international markets or perhaps even in activities that went beyond pizza. In May 2007, John Schnatter stepped down as the executive chairman of Papa John's to serve just as the head of the board of directors. Schnatter was optimistic about the future of Papa John's. He wanted to see Papa John's get back on the path of opening 200 to 300 stores per year. The question facing Papa John's executives was which path would produce rapid but profitable growth.

Study Questions:

1. Compare the prices for Papa John's, Little Caesars, and Domino's for a large pepperoni pizza. You may have to go online or call local franchises to get this information. It is not in the case.
2. What is your assessment of Papa John's differentiation strategy? On what bases does the company differentiate?
3. Is Papa John's strategy sustainable? What is your assessment based on a VRIO analysis?
4. What do you recommend Papa John's do to achieve its growth goals?

Teaching Plan Outline

1. **Assessment of industry and general environmental threats**. I begin by asking, what is your assessment of Papa John's external environment? This allows students to address the different threats in both the general and industry environments (10-15 minutes). My goal is to reinforce concepts in earlier chapters, but to move through this part of the analysis quickly.

2. **Group Exercise: Assessment of the bases of differentiation** (30-40 minutes): I begin with a group exercise that asks students to systematically consider how Papa John's employs different methods of differentiation. Students should consider each base of differentiation discussed in the chapter and then consider: a) does Papa John's differentiate on that dimension; b) is the source of

differentiation valuable to customers – does it generate a willingness to pay a premium? c) rank the ways that Papa John's differentiates in order of importance. Generally, I like to see the students develop their own criteria for importance.

3. **Is Papa John's strategy sustainable? (15-20 minutes)** I begin by having them contrast Papa John's strategy with other major competitors in the industry. Why are people willing to pay significantly more for a Papa John's pizza than for its competitors? How much more does it cost Papa John's to make a pizza than it does Domino's or Little Caesars? (The case doesn't provide this information, but it can be insightful to speculate how much more it might cost given the price of cheese.) Are the different bases of differentiation rare and costly to imitate? The discussion should arrive at something like the analysis in the table below.

4. **Growth Strategy (15-20 minutes):** There is no clear answer as to what Papa John's should do. The emphasis should be on generating and evaluating the options that Papa John's has. **What are Papa John's options?** I want to push students to identify as many options as possible in this discussion. **What is your evaluation of each option?** Students should be able to identify risks or weaknesses in each of the options identified and be able to evaluate the extent to which each option leverages resources and capabilities that allows the company to successfully diversify.

ANALYSIS

Product Differentiation

Papa John's International exemplifies a firm pursuing a product differentiation. In fact the Mission Statement of Papa John's stated that it would strive to create superior brand loyalty, i.e. "raving fans", through (a) authentic, superior-quality products, (b) legendary customer service, and (c) exceptional community service.

Product differentiation is a business strategy whereby firms attempt to gain a competitive advantage by increasing the perceived value of their products and services relative to the perceived value of other firms' products and services. Papa John's wanted to differentiate itself on the basis of its legendary quality and customer service. It focused on making the best pizza and emphasized this aspect in its customer marketing efforts. It altered the objective properties of its pizza by focusing on the quality of the ingredients used and in adhering to the process of making the pizza. Though the case does not explicitly mention about the customer perception it does indirectly tell us that the phenomenal growth of the company could be attributed to the quality positioning of the company in the eyes of the customers.

Product differentiation is always a matter of customer perception but firms can take a variety of actions to influence these perceptions and these actions can be thought of as different bases of product differentiation that we will attempt to apply to the case in the next piece of analysis.

Bases of Product Differentiation

By using a combination of internal and external resources, Papa John's was determined not to compete with its competition on price. Product Differentiation was the strategy that was adopted by Papa Johns and it communicated it clearly in the market place. Focusing on a quality product, active participation in the local communities in which they operated, and product branding enabled Papa John's to hold its own with the other pizza chains. Papa John's had worked to create a product branded in such a way that customers came to expect the very best pizza; and they were willing to pay a premium price. This explains why Papa John's was committed to holding firm on the quality and prices of their pizzas.
In this section one is interested in understanding the bases of product differentiation or the factors that gave Papa John's a unique positioning. Broadly speaking there are twelve bases of product differentiation but there could be many more. There is actually no exhaustive list of all bases as new bases are being invented and developed all the time, the only limitation being the imagination of companies to figure out ways to differentiate. The common purpose of all bases of product differentiation is to create the perception that a firm's product or services are unusually valuable. However different bases of product differentiation attempt to accomplish this objective in different ways – they fall in three categories (1) firms that differentiation on the attributes of their products and services (2) firms that differentiate on the relationships between its customers and finally (3) firms that differentiate on the basis of its linkages within or between firms. The following analysis focuses on these three categories and the bases within each category. We will evaluate the company on each of the bases whether they are sources of product differentiation or not. Of course just being different may not necessarily lead to a competitive advantage to the company and this will be assessed using the VRIO framework later.

Twelve Bases of Product Differentiation

Focusing on the Attributes of a Firm's Products or Services

Product Features

This was the most important and significant of the bases of product differentiation for Papa John's. For well over two decades the company had maintained that it was "making a quality pizza using Better Ingredients" and that it always wanted to be the best Pizza Company. Papa John's core strategy was to sell a high-quality pizza for takeout or delivery. Their focus on using the highest-quality ingredients to produce a high-quality pizza was communicated in their motto: "Better Ingredients. Better Pizza.

There were many ways that it differentiated itself from its competitors – for example Papa John's traditional crust pizza was prepared using fresh dough and that was never frozen like other competitors. Papa John's pizzas were made from a proprietary blend of wheat flour, cheese made from 100% real mozzarella, fresh packed pizza sauce made from vine-ripened tomatoes (not from concentrate as was the practice among its competitors) and a proprietary mix of savory spices, and a choice of high quality meat (100% beef, pork and chicken with no fillers) and vegetable toppings.

Product Complexity

Product Complexity can be thought of as a special case of altering a product's features – the extent to which a company can create differences in products that can convince customers that its products are more valuable than the products of other firms.
Early on, Schnatter also introduced a signature bonus that served to signal the quality of the product: Each pizza was accompanied by a container of the company's special garlic sauce and two pepperoncinis. Papa John's also extended its menu. In January 2006, Papa John's announced that they were adding dessert pizzas to their carryout and delivery menus. The company created Papa's Sweetreats in direct response to consumer demand and in July 2008 introduced another permanent addition to its menu: Chocolate Pastry Delight.

Timing of Product Introduction

Introducing a product feature can help to create a product differentiation. Papa John was the first mover many a time. Though the ability of the company to generate sustainable competitive advantage from these introductions was debatable, it definitely improved the positioning of the firm and developed its reputation. Papa John leveraged technology to its own business advantage. The company made ordering pizza even more convenient with the introduction of online ordering in 2001. It was the first pizza company to offer online ordering. Papa John's online sales grew exponentially between 2001 and 2007, with online sales growing 50 percent a year and nearly reaching $400 million in 2007.

In October 2006, Papa John's introduced online ordering in Spanish in an attempt to meet growing customer needs and expectations. According to Javier Souto Papa John's regional marketing director, "Papa John's has proven to be a technology leader in the pizza industry as the only national pizza chain to offer online ordering for all of its restaurants and now we are pleased to offer that service to our many Spanish-speaking customers."

In November 2007, Papa John's led the way, once again, by offering text message ordering. More than 20 percent of all Papa John's sales came online or via text. Papa John's was also using both the Internet and mobile technologies to make potential customers aware of current promotions and to allow them to easily order a pizza from virtually anywhere.

Location

Expanding reach was important but maintaining quality and management control in the expansion process was important. The underlying links within the firm and with other firms along with strong organization policies and practices helped the company manage its growth remarkably well. In this way Papa John's was able to grow in terms of new restaurant openings while maintaining its premium quality positioning and legendary customer service standards.

Papa John's strategy was to expand domestically and internationally. Since 2003, growth has been positive and relatively stable, and Papa John's executives believed that there was significant opportunity for domestic unit growth. Schnatter was optimistic about the future of Papa John's. He wanted to see Papa John's get back on the path of opening 200 to 300 stores per year. Over the next five years, he wanted to see Papa John's reach the 4,000 stores mark, and long term he aspired to see 6,000 to 7,000 stores worldwide.

Papa John's was among the highest return on invested capital (ROIC) in the restaurant category. While domestic growth was anticipated to be stable, international opportunities were significantly large and promising. Papa John's had 350 domestic restaurants and 1,100 international restaurants that were contractually scheduled to open over the next 10 years.

Papa John's also sought to reduce the number of company-run stores by turning them into franchising opportunities. At the end of 2007, Papa John's owned approximately 680 locations, while the rest were franchised. By selling the corporate-owned stores to franchisees, Papa John's was expected to lower its net lease payment from $24.0 million in 2008 to $9.4 million in 2012. Papa John leased most of the corporate and retail building spaces it required. It further subleased retail locations to franchise owners. Leasing building space gave Papa John's the flexibility to move locations quickly with minimal cost, should a profitable location turn bad.

In fact Papa John's had expressed its intention to lower the number of corporate-owned stores by about five percent over the next few years. Franchising more of its current company-run stores offered Papa John's some important benefits. Franchise royalties were based on a percentage of sales and not on a percentage of profits, which allowed Papa John's to ensure a steady stream of revenue even in a difficult operating environment.

The Central Commissariat System was a key advantage for the company as it allowed Papa John's to start up more stores because they did not require additional expensive equipment to be purchased for each store. Part of the company's strategy was to expand into new markets only after a commissary had been built that could support the growth and geographical expansion of restaurants. Papa John's also leased the trailers used to distribute ingredients from the commissary centers to the retail locations, typically on an eight-year lease agreement. By leasing the trailers, it allowed Papa John's to manage their shipping logistics and costs in a structured manner while not requiring them to maintain the trailers as they aged.

Further the Quality Control Center concept ensured that growth was not at the expense of quality. The 10 Regional Quality Control Centers provided high quality ingredients to clearly delineated areas. This enabled the company to expand quickly and fulfill its ambitious growth strategy.

Focusing on the Relationship Between a Firm and its Customers

Product Customization

This base seeks to create product differentiation by customizing a product for specific customer needs or applications. In this connection Papa John was active in creating diversity in its menu offering to meet local tastes and customs, especially for its international operations. In addition to fresh dough, the company offered a thin crust pizza and Papa's Perfect Pan Pizza, which featured a square, thick buttery-tasting crust made with olive oil, and a zesty robusto pizza sauce with chunks of tomato and flavored with garlic, Italian herbs and spices. Each traditional crust and pan pizza offered a container of the company's signature special garlic sauce and a pepperoncini pepper whereas each thin crust pizza was served with a packet of special seasonings and a pepperoncini pepper.

The company also had a practice of testing new product offerings both domestically and internationally. The new products became a part of the permanent menu if they met certain established guidelines.

Consumer Marketing

Unlike other pizza companies that used the advertising and marketing media to create a quality image which was not substantiated in real life, Papa John had a strong quality product underlying its brand development efforts and this created a sustained differentiation in the eyes of the customer. The unwavering focus on quality and customer service had enabled Papa John's to be rated number one in customer satisfaction among all pizza chains in the American Customer Satisfaction Index for nine consecutive years from 1999 to 2008. While other national pizza chains in 2000's had focused their national marketing efforts on deeply discounted or reduced-ingredients pizzas and other offerings such as pasta, the company had remained focused on delivering a superior-quality pizza.

Another differentiated approach of Papa John's was the localization of its marketing programs that helped it target and reach customers within the delivery area of each restaurant, making extensive use of print materials including targeted direct mail and store-to-door couponing. Local marketing efforts also included a variety of community oriented activities within schools, sports venues and other organizations.

Local marketing efforts were supplemented with radio and television advertising, produced both locally and on a national basis. Additionally, the company developed joint cross-marketing plans with certain third-party companies. For example, it entered into marketing and partnership agreements with Six Flags theme parks and Live Nation amphitheaters.

Product Reputation

This is perhaps the most important base of differentiation as Papa John enjoyed an enviable reputation among its customers. Papa John's core strategy was to sell a high-quality pizza for takeout or delivery. Their focus on using the highest-quality ingredients to produce a high-quality pizza was communicated in their motto: "Better Ingredients. Better Pizza." Papa John's was able to prove its superior quality and considered it a sign of success when Pizza Hut sued it over the assertion that they had better ingredients and, therefore, a better pizza. Papa John's was ultimately successful in proving they used fresher ingredients and were, therefore, able to continue using their slogan. This was a significant win over the largest pizza chain in the US.

Papa John's created the reputation of a superior brand loyalty, i.e. "raving fans", through (a) authentic, superior-quality products, (b) legendary customer service, and (c) exceptional community service. The company painstakingly built its reputation in each of these three areas. Papa John exploited this reputation by charging premium prices for its pizzas and even when other pizza chains were focusing their national marketing efforts on deeply discounted or reduced-ingredients pizzas and other offerings such as pasta, Papa John's remained focused on delivering a superior-quality pizza.

This reputation was built on the 6 core values of Papa John's. Unlike many other companies for whom mission and value statements were just words printed on a piece of paper – at Papa John's the employees and partners truly believed and practiced their core values at work. The inspirational leadership provided by the founder was responsible for the motivated work force at Papa John's.

The first core value was (1) Focus – on delivering a traditional Papa John's quality pizza (2) Accountability – By walking the talk in holding itself accountable to its customers and business partners the company was able to earn the right to hold other stakeholders to a higher level of accountability (3) Superiority – Papa John's exemplified high standards of customer satisfaction that was consistent, quantifiable, and demonstrable and it wanted to be the best in everything that it chose to do (4) P.A.P.A – People Are Priority Always philosophy that depended on the company's ability, as a team, to work together to achieve goals and expectations (5) Attitude – Papa John's culture was about bringing a positive mental attitude to work as the company believed that its attitude was a reflection of what it valued and was the major difference between winners and losers (6) Constant Improvement – The company always raised the bar and did not want to rest on its past laurels as it felt that was the only way it could get better and differentiate itself.

From its beginning, Papa John's had been active in community affairs, from supporting local sports teams with fund-raising opportunities, to offering college scholarships. Papa John's had awarded more than $5 million in college scholarships. Papa John's actively supported the National FFA, Cerebral Palsy K.I.D.S. Center, and Children's Miracle Network, to name only a few. Papa John's executives believed that giving back to the community was good business.

Focusing on Links Within and Between Firms

Linkages among functions within a firm

The company always emphasized that people were their most important asset. As a corporate policy it was committed to team member training and development. It had comprehensive training programs, incentive compensation and opportunities for advancement. Team member training programs were conducted for corporate team members, and offered to the company's franchisees at training locations across the United States and internationally. It also offered performance-based financial incentives to corporate and restaurant team members at various levels. This helped the company attract, motivate and retain people who then delivered the legendary compliance.

People were the most important asset of Papa John as outlined in its mission statement. Papa John's provided clear, consistent, strategic leadership and career opportunities for Team Members who (1) exhibited passion toward their work (b) upheld the company's Core Values (c) took pride of ownership in building the long term value of the Papa John's brand, and (d) followed ethical business practices. To create passionate employees Schnatter set up the Operation Support Service and Training (OSST) Center.

The Central Commissaries System was one of the key strategic factors underlying the success of the company. The company operated through own as well as franchisees. Domestic restaurants were restaurants that were wholly owned by Papa John's in the contiguous states. Domestic franchises were restaurants in which Papa John's had licensed to franchisees for a franchise fee. These franchisee restaurants, as well as company-owned restaurants, were supported by domestic commissaries that supplied pizza dough, food products, paper products, small wares, and cleaning supplies twice weekly to each restaurant. There were 10 regional commissaries that supported domestic restaurants and franchises.

The Central Commissary allowed Papa John's to exercise control over the quality and consistency of its products. It addressed strategic needs of quality control at the same time addressed financial needs of stores before they attained a critical mass or profitability. The system not only reduced labor costs and reduced waste because the dough was premeasured, but also maintained control over the consistency of the product. The centralized production facility supplied all of the Papa John's stores with the same high-quality ingredients for their pizza. One of the most important aspects of this system is that it allowed Papa John's to start up more stores because they did not require additional expensive equipment to be purchased for each store. Part of the company's strategy was to expand into new markets only after a commissary had been built that could support the growth and geographical expansion of restaurants.

Throughout Papa John's tremendous growth during its first 10 years of operation, its marketing programs targeted the delivery area of each restaurant, primarily through direct mailings and direct store-to-door couponing. In an effort to improve the marketing campaign, John Schnatter realized that he needed to find a printing company that could offer consistent high-quality service at a reasonable price. In the mid-1990s, Schnatter found a printer who met his expectations better than most. The decision to vertically integrate into the business of printing was made. The franchise owners were not required to use the in-house printing service. The in-house printing operation was required to earn the business of each franchisee. In an effort to keep costs low within the printing division, Papa John's regularly accepted outside print jobs. It was not uncommon to print a flyer for a real estate company between jobs for a Papa John's franchise. In additional efforts to keep costs low, the printing presses were operated 24 hours a day.

Linkages with other firms

Papa John's had entered into numerous marketing partnerships over the years. For example, Papa John's aligned with Coca-Cola to offer only Coke products in their stores through 2011. When Papa John's added a pan pizza to its menu, they enlisted the aid of former Miami Dolphins quarterback Dan Marino. At the time, this was the most intensive new product launch ever undertaken by Papa John's. Another combined effort for Papa John's involved coordinating with eBay for a limited edition Superman pan pizza box. In Kentucky, Papa John's and Blockbuster video combined efforts in a "take dinner and a movie online" in which the customer would receive a free 30-day trial of Blockbuster online with an online pizza purchase at papajohns.com

For example, it entered into marketing and partnership agreements with Six Flags theme parks and Live Nation amphitheaters, which provided for cross-marketing activities. The company was committed to explore additional cross-marketing opportunities with third-party companies.

Papa John's commitment to the highest-quality ingredients created challenges in managing the supply of the foods that went into its pizza. The volatility in the price of cheese had been a major problem for Papa John's. Cheese material costs contributed approximately 35 to 40 percent of Papa John's restaurants' food costs. In order to reduce the cheese price volatility, Papa John's partnered with a third-party entity formed by franchisees, BIBP Commodities, Inc., whose sole purpose was to reduce cheese price volatility to domestic system-wide restaurants. This allowed Papa John's to purchase cheese from BIBP at a fixed quarterly price. Profits and losses from BIBP were then passed on to Papa John's.

Product Mix

The company's operating model enabled it to ensure that it lived up to its slogan of Better Ingredients and Better Pizza. The site selection services that were offered by Papa John's to its franchisee partners were effective in ensuring that the right customer segments were targeted. The product of Papa Johns was a superior pizza and that was the core capability of the company – it also persisted in maintaining this positioning when other products were being cross sold at other competing pizza chains. The close partnership of the franchisee and Papa John's helped the company deliver a consistent product mix to its customers.

Distribution Channels

Papa John's had a very efficient operating system. The operating and distribution systems, restaurant layout and designated delivery areas lowered restaurant operating costs and improved food quality, and promoted superior customer service. The domestic QC Center system leveraged volume purchasing of food and supplies, and provided consistency and efficiencies of scale in fresh dough production. This eliminated the need for each restaurant to order food from multiple vendors and the need to commit substantial labor and other resources to dough preparation and manage the quality aspects of this vital input to the preparation of the pizza.

The company devoted significant resources to provide Papa John's franchisees with assistance in restaurant operations, management training, team member training, marketing, site selection and restaurant design. It also provided significant assistance to licensed international QC Centers in sourcing high quality suppliers' located in-country or regional suppliers to the extent possible

Service and Support

Papa John's strategy was to grow through the franchisee model. Papa John also realized the importance of strengthening the franchisees and ensuring that they also lived up to the same exacting and demanding standards that the company had for its employees. In fact the mission statement of the company mentioned that Papa John would partner with its franchisees to create a continued opportunity for outstanding financial returns to those franchisees who (a) adhere to Papa John's proven Core Values and systems, (b) exhibit passion in running their businesses, and (c) take pride of ownership in building the long-term value of the Papa John's brand.

In order to create passionate employees and within its franchisee network, Schnatter set up the Operation Support Service and Training (OSST) Center. It was created to be actively engaged in the training and development of "team" members. To instill his passion into his new franchisees and corporate employees, Schnatter had them complete a management training program at the OSST Center when they started with the company. The aim of this training was to help franchise owners be successful and to instill in them a firm understanding of the Papa John's culture. By making a franchisee feel like they were in a partnership with Papa John's, it facilitated a level of buy-in that the company believed was seldom found in restaurant chains.

Papa John's was committed to maintaining and developing a strong franchise system by attracting experienced operators, supporting them to expand and grow their business and monitoring their compliance to the company's high standards. Papa John's sought to attract franchisees with experience in restaurant or retail operations and with the financial resources and management capability to open single or multiple locations. To assist the franchisees in procuring high quality ingredients and toppings to ensure consistency of the final product, the company encouraged its franchisees to purchase from its own Quality Control Centers.

To ensure consistent food quality, each domestic franchisee was required to purchase dough and seasoned sauce from the company's Quality Control Centers (QC Centers) and to purchase all other supplies from approved suppliers. These QC Centers delivered the ingredients to individual restaurants twice weekly. QC Centers outside the U.S. or in remote areas were operated by franchisees pursuant to license agreements or by other third parties. The company devoted significant resources to provide Papa John's franchisees with assistance in restaurant operations, management training, team member training, marketing, site selection and restaurant design. It also provided significant assistance to licensed international QC Centers in sourcing high quality suppliers located in-country or regional suppliers to the extent possible. These systems and practices strengthened the linkages between Papa Johns and its franchisee and served to address their operating concerns. There was a unique close bonding between Papa John's and its franchisees and gave it an advantage over other companies operating in the pizza space.

The Value of Product Differentiation

Product Differentiation was valuable to Papa John to the extent that it was able to charge higher prices for its pizzas in the midst of cut-throat competition. As shown in the earlier section, each of the twelve bases of product differentiation assisted it in the process. We will now attempt to assess whether these bases of product differentiation enabled Papa John to neutralize its threats and exploit its opportunities.

Product Differentiation and Environmental Threats

Threat of Entry – There was relatively low fixed costs associated with entering into the restaurant business. Many small scale local entrepreneurs opened pizza restaurants at single locations and they attracted local clientele on the basis of some historical and socially complex relationships but many of these single locations did not grow beyond a certain size as the owners did not have the management band width required to grow the business as well access to capital. Large restaurant chains, like Papa John's, were able to realize economies of scale that made competition extremely difficult for small operators. Some of these advantages included purchasing power in negotiating food and packaging supply contracts, as well as real estate purchasing, location selection, menu development, and marketing.

Threat of Rivalry – Papa Johns had carved its own quality niche in the pizza industry and thereby it reduced the threat of rivalry but within the pizza industry there was high rivalry – more so because the top 4 companies accounted for 88% of the aggregate sales in the pizza restaurant category. In some ways the unique business and operating model of Papa John's meant that it was able to maintain quality, improve consistency of customer service and create bonding with its franchisees in ways that was unheard of before. Other pizza chains tried to compete in ways other than Papa John's emphasis. Some chains focused on being less expensive or having a broad menu.

Threat of Buyers – The pizza category was also suffering from a longer-term trend, in which the growth of take-out food capabilities at full service restaurants and the creation of more diversified menus at fast-food competitors gave consumers other options. In response, competition among pizza chains centered on new product offerings, such as pasta and desserts. The meal options available for consumers were increasing both for convenience dining and at-home consumption. The quality of frozen pizza available at grocery stores had improved significantly in recent years. A broader trend was that restaurant and quick-service restaurant dinner occasions were declining, which was significant for pizza restaurants such as Papa John's, which gained 70 percent of its sales from dinner orders.

Declining restaurant and quick-service restaurant dining was attributed to an increase in at-home dinner preparation, linked to a decline in the percentage of women in the workforce. The high price of gasoline and concerns about the U.S. housing market had forced many consumers to scale back the portion of the household budget allocated toward dining out.

The franchisees were another set of customers and the relationship between Papa John and its franchisees reduced the possible threat of the franchisees abandoning the relationship with Papa John. The support that was extended by Papa John to each value chain activity from raw material procurement to site selection to supply chain management support and employee training and development ensured that the franchisees were in a better position to earning superior returns than other pizza chain franchisees.

Threat of Substitutes – This category faced the same challenges from substitutes as was typical with most fast food companies and amongst fast food companies. The large number of restaurant types throughout North America made it unlikely that any firm would gain a competitive advantage by offering one style or type of cuisine. The one principle that made Papa John's rare in the restaurant industry was their ongoing passion to offer the perfect pizza.

Threat of Suppliers – The volatility in the price of cheese had been a major problem for pizza chains. Cheese material costs contributed approximately 35 to 40 percent of a restaurants food costs. In order to reduce the cheese price volatility, Papa John's partnered with a third-party entity formed by franchisees, BIBP Commodities, Inc., whose sole purpose was to reduce cheese price volatility to domestic system-wide restaurants. The company faced food commodity cost inflation and rising energy costs that increased in-store utility costs and delivery driver fuel costs. Another area of rising costs stemmed from legislation at the federal level as well as many states that mandated a higher minimum wage.

It is clearly seen that the product differentiation strategy of Papa John's reduced the degree of rivalry in the pizza restaurant segment and positioned it strongly to neutralize external threats.

Product Differentiation and Environmental Opportunities

The US pizza market was a mature industry and Papa John's strategy was to work on refining its products, introducing new side dishes, emphasizing product quality and leveraging technology to make it more convenient for customers to order pizza. As we have seen in the section on bases of product differentiation, the company sought to leverage the relationship with its franchisees to create product differentiation opportunities. As a part of the overall branding strategy the company tried to project its image as a true corporate citizen. Papa John's demonstrated a strong commitment to community service and social causes in the immediate business environment.

Its excellent supply chain, franchisee development model would enable the company to exploit opportunities in the market but what is doubtful is whether its quality positioning will be as useful in new markets around the world. Scalability of the operations can be a source of advantage for the company but whether it will give them a sustained competitive advantage over its competitors is debatable.

For international expansions the company felt that its emphasis on quality would yield benefits – this may not be true of the Asian market where a majority of the customers may not be able to appreciate the finer differences in the quality of the pizza. Further, the take out model may not work well as consumers preferred a dining experience to ordering food home. The case also mentions the need of creating dining areas in the restaurants as international customers thought of eating out as a more formal dining experience than customers in the USA.

The pizza market would lead to a consolidation as competition stems further in the years to come and product differentiation opportunities reduce further.

Product Differentiation and Sustained Competitive Advantage

It has been seen in the earlier section that the current product differentiation strategy employed by Papa John helped it to neutralize external threats and exploit environmental opportunities in the USA.

In this section we will assess whether this strategy can be a source of competitive advantage for the company for the USA as well for its international operations. The ability of a strategy to add value to a firm must be linked with rare and costly to imitate organization strengths in order to generate a sustained competitive advantage.

Rare Bases of Product Differentiation

The one principle that made Papa John's rare in the restaurant industry was their ongoing passion to offer the perfect pizza. Many companies claimed to place quality at the forefront of their business, but often the commitment to quality went no deeper than public relations and was not a core value.

The other major chains were not using the quality emphasis. Also other pizza restaurants were slowly metamorphosing themselves by introducing other products in their meal menus like pasta and Mexican food.

The Imitability of Product Differentiation

We analyze the bases of product differentiation on the basis of cost of duplication. How costly it is to duplicate a particular basis of product differentiation depends on the kinds of resources and capabilities that basis uses – whether they were based on historical reasons, whether there is an uncertainty about how these resources and capabilities are built and if they are socially complex in nature. The analysis of Papa John's bases of product differentiation is given in the table.

Bases of Product Differentiation	**Duplication Costs**
Product Features	Medium – Uncertainty and Socially Complex
Product Mix	Low
Links with Other Firms	High – History, Uncertainty and Socially Complex
Product Customization	Low
Product Complexity	Low
Consumer Marketing	Medium – History and Uncertainty
Links between Functions	High – History, Uncertainty and Socially Complex
Timing	Medium – History and Uncertainty
Location	Low
Reputation	High – History, Uncertainty and Socially Complex
Distribution Channels	Medium – History and Uncertainty
Service and Support	High – Uncertainty and Socially Complex

The cost of duplication is high in some of the bases of product differentiation and some of them may be a source of competitive advantage for the company. However there was a lot of uncertainty facing the company as (1) the pizza market was evolving (2) the international market was varied and diverse in its consumer behavior (3) product diversification required capabilities in different cuisines and quality aspects needed to be addressed.

Organizing to Implement Product Differentiation

Papa John's was organized in a manner that it was able to deliver on its promise on product quality, customer service and franchisee development. The commitment to team member development and franchisee support in the areas of restaurant operations, management training, team member training, raw material sourcing, supply chain, marketing, site selection and restaurant design was intense and distinguished it from other competitors.

Its emphasis on menu development at the national and international level and ability to integrate technology into its business model was evident.

The organization culture focused on attracting, motivating and retaining talent by investing in their development, compensating them adequately and providing them opportunities for growth within the organization.

The founder's role in developing the culture of the organization was significant. The company had built an enviable reputation among its employees as a unique company and this increased the levels of employee ownership and involvement in the company.
Schnatter was also pragmatic and professional in his management style. In May 2007 he stepped down as the executive chairman of Papa John's to serve just as the head of the board of directors. In this new role, he planned to remain as spokesman for the company with no cash compensation, just stock options. He was a leader and he fully empowered and supported Nigel Travis, President and CEO and pulled back from the day-to-day operation of the company. It indicated an empowered work culture.

We have insufficient information in the case about how the company was structured however it is reasonable to conclude that it had a complex matrix structure to manage the relationships within the firm and with other firms and other third party vendors. The product development focus of the company meant that it would have teams for domestic and international markets who would work towards creating innovations in the menu and refining the product further.

The company was the first to incorporate online ordering options and then in Spanish – these actions spoke of a company culture that was oriented towards the customer and creating convenience at each touch point with the customer. The organization was structured around flexibility and revolved around the customer and the franchisee. There were historical, socially complex and uncertainty revolving around the organization capabilities of Papa John's and these would be extremely difficult to imitate for another competitor.

Strategic Option Analysis and Recommendation

In this concluding section we analyze the three options facing Papa Johns and provide recommendations –

The US market was maturing and growth prospects were limited. It was imperative for Papa Johns to expand internationally where the market was emerging and nascent in many ways. Papa John's international efforts centered in Mexico, Canada and the United Kingdom but it was missing out on the growth story in Asia by far the largest potential market fueled by growing incomes and the rise of the middle class with substantial purchasing power. The size of the international market was large and was the only way Papa Johns could fulfill the desire of Schnatter to open 200-300 stores per year and reach the short term target of 4,000 stores and the long term target of 7,000 stores.

Pizza Hut already had a first mover advantage in the international markets and Papa Johns had to move quickly. International expansion was also more lucrative as the growth would be faster than the US market in spite of the global economic recession. The challenges would be to maintain the quality of the pizza and the customization of the menu for international customers. In this connection it would benefit the company to learn from the experiences of Pizza Hut and other competitors. The biggest challenge would be brand recognition and the cost of developing the awareness of the Papa Johns brand in these markets.

In building its international infrastructure, the company would need to cultivate new relationships and develop new skills. One critical element was the company's ability to continue to partner with local producers in order to maintain tight quality control and keep ingredients fresh. In terms of new skills, Papa John's needed to develop the ability to modify its standard smaller carry-out restaurant blueprint. Perhaps more importantly, the commissary model may be difficult to replicate internationally. This has been a key to Papa John's success. If it cannot be replicated in other countries, Papa John's may not be able to deliver the same level of quality at anywhere near the cost that it does in the U.S.

Looking at the success of firms such as McDonald's or Yum! Brands, Inc.'s Kentucky Fried Chicken, there was persuasive evidence that international customers tended to view their eating-out experience as more of a formal dining event. Thus, the standard Papa John's takeout restaurant model would need to be expanded to accommodate a sit-down dining area for patrons. The supply chain model and franchisee support and development model for these international markets would have to be developed by Papa Johns and would require an investment of time.

From the specifics provided in the case it is not certain whether the company had realized marketing efficiencies as its programs were highly localized. The company is a one product company – pizza and this strategy had its own inherent risks. The company would have to expand its menu slowly as per customer demand but maintain its premium pricing as it would continue its emphasis on superior quality products. While expanding its menu it would have to carefully select products that have a complementary effect on its main product – pizza.

On the domestic front Papa Johns could consider acquiring restaurants – only if those restaurants would be under its own brand. This would help it to penetrate the market and reduce acquisition costs.

However the third alternative for Papa John's that would involve diversifying from pizza seems to be risky. The comparison with Yum! Brands in not justified as Yum! Brands is a holding company with a portfolio of fast food restaurant brands whereas Papa John's was a restaurant brand and it was not certain whether it would be able to build other restaurant brands and even it lend its own brand it would definitely dilute Papa John's brand. Papa John's stood for Pizza and it was known as a Better Pizza Company and it would be difficult to transfer this branding to other products or to another additional restaurant chain with a different product portfolio under its own brand. On the other hand, the company has a lot of experience with managing the supply chain in fast foods to deliver relatively higher-quality products than its competitors. Perhaps this model can be replicated in other fast food segments. For example, to address the growing influence of the Hispanic population and culture in the United States the company could expand its offering by starting a Hispanic-Mexican-themed restaurant. It would be risky to use the Papa John's name, but it might be able to command price premiums based on better ingredients.

Ryanair – The Low Fares Airline

This case covers Ryanair, the first budget airline in Europe, in its recent challenges with competition, supplier costs, and general economic conditions. The case has considerable data on costs and competitors and is an excellent vehicle for exploring issues related to cost leadership. Professor O'Higgins' comprehensive teaching note can be obtained by registered instructors (registration is not difficult) on The Case Centre's website: http://www.thecasecentre.org.

In using this case, I would carefully consider the maturity and norms of your students. In some programs, students are experienced in case analysis and preparation by the time they get to the strategy course. In others, the students may be new to case preparation and analysis. Students new to cases are likely to be overwhelmed by the length and amount of data in the case. I would adapt the study questions and the focus of the discussions accordingly.

Torrey Nano, Inc.
Teaching Outline

Torrey Nano is a young biotech firm that faces a decision about whether to vertically integrate into manufacturing. The decision has long-term implications for the future of the firm. Throughout its short history, the firm has focused solely on R&D. However, with Nano-4, its first pharmaceutical product, nearing human testing, it must decide whether or not to build a small-scale pilot plant. Issues around opportunism, capability, and flexibility all have to be considered. I have a very simple teaching plan that has worked very well. Some students are intimidated by biotech or cases with technical material, but while this case deals with a science-based industry, it has no technical material.

Objectives

Torrey Nano allows students to apply what they have learned about flexibility and real options in chapter 6 and all three approaches to vertical integration that are discussed in chapter 8. Students must address issues involving transaction costs and opportunism, capabilities, and flexibility or real options. The case also illustrates the value of real options reasoning as compared to relying on NPV analysis for investment decisions.

Study Questions

1. What should Torrey Nano do for the manufacturing of Nano-4 in Phase I and Phase II clinical trials? What should it do about manufacturing of Nano-4 in Phase III trials and commercialization?

2. What are the strengths and weaknesses of each option? Calculate the NPV for each option.

Teaching Plan

1. Introduction and vote on the options (5-10 minutes)
2. Divide into groups and prepare for debate (20-25 minutes)
3. Debate: presentation by each group and cross examination (25-30 minutes)
4. Final discussion of what Torrey Nano should do (10 minutes)
5. Lessons on vertical integration (10 minutes)

Introduction and Vote

I begin the class by drawing a decision tree on the board that outlines the five option (see Exhibit 1). I then ask the class to vote on what they favor. More often than note, the vote has been somewhat evenly split between the five options.

Option 1: Torrey Nano builds a pilot plant for Phases I/II and a full-scale plant for Phase III.

Option 2: Torrey Nano builds a pilot plant for Phases I/II and licenses out the manufacturing rights for Phase III.

Option 3: Torrey Nano contract out manufacturing for Phases I/II, build a full-scale plant in-house for Phase III.

Option 4: Torrey Nano contracts out manufacturing for Phases I/II and license out manufacturing rights for Phase III.

Option 5: Manufacturing in all phases would be done by licensee.

Divide the Class into Groups to Prepare for Debate

After the vote, I divide the class by having them join with others who voted as they did. Sometimes it may be useful to assign multiple groups to the same option, but I have had as many as 15 students in a group and it has consistently worked well even without breakout rooms. I ask the groups to prepare to argue why their option should be chosen. I also instruct them to evaluate the weaknesses of the other options and prepare to argue against them. The resulting clamor once the groups start preparing is loud, but there is almost always a lot of energy and engagement in the room.

Debate the Strengths and Weaknesses of Each Option

I begin by asking the students supporting Option 1 to present their case. After they have concluded, I open it up to the other students to question the Option 1 group. I will make notes on the board that are organized something like Exhibit 3 and will put a + or – by the point. My role at this point is mostly note taking and calling on students. I will not try to direct the discussion or make substantive observations at this point. Typically, I may need to make or ask for clarifications on facts in the case (e.g. many students miss that none of the options call for Torrey Nano to market Nano-4).

After we have discussed option 1, we then go to each of the other options. The discussion of the other options tends to take less time because students have made contrasts that draw out the strengths and weaknesses of the other options. Students will usually bring up the relative NPV figures for the different options. If they don't, I will ask them what their calculations show. (I will write down the NPVs on the decision tree as shown in Figure 3) There is often some disparity depending on one's assumptions, particularly about discount rates. At this point, I will usually share my calculations and assumptions (see Exhibit 2). These calculations are reasonably robust to different assumptions and most students can buy into them. It is sometimes helpful to ask, <u>Shouldn't we just go with the highest NPV?</u> This allows students to raise more issues around capabilities, opportunism, and options if they have not already done so.

During the debate, I have never had a class converge on a single option. After each group has presented, I will take another vote. Typically, a few votes change (Options 2 and 4 lose adherents and Options 1 and 5 gain).

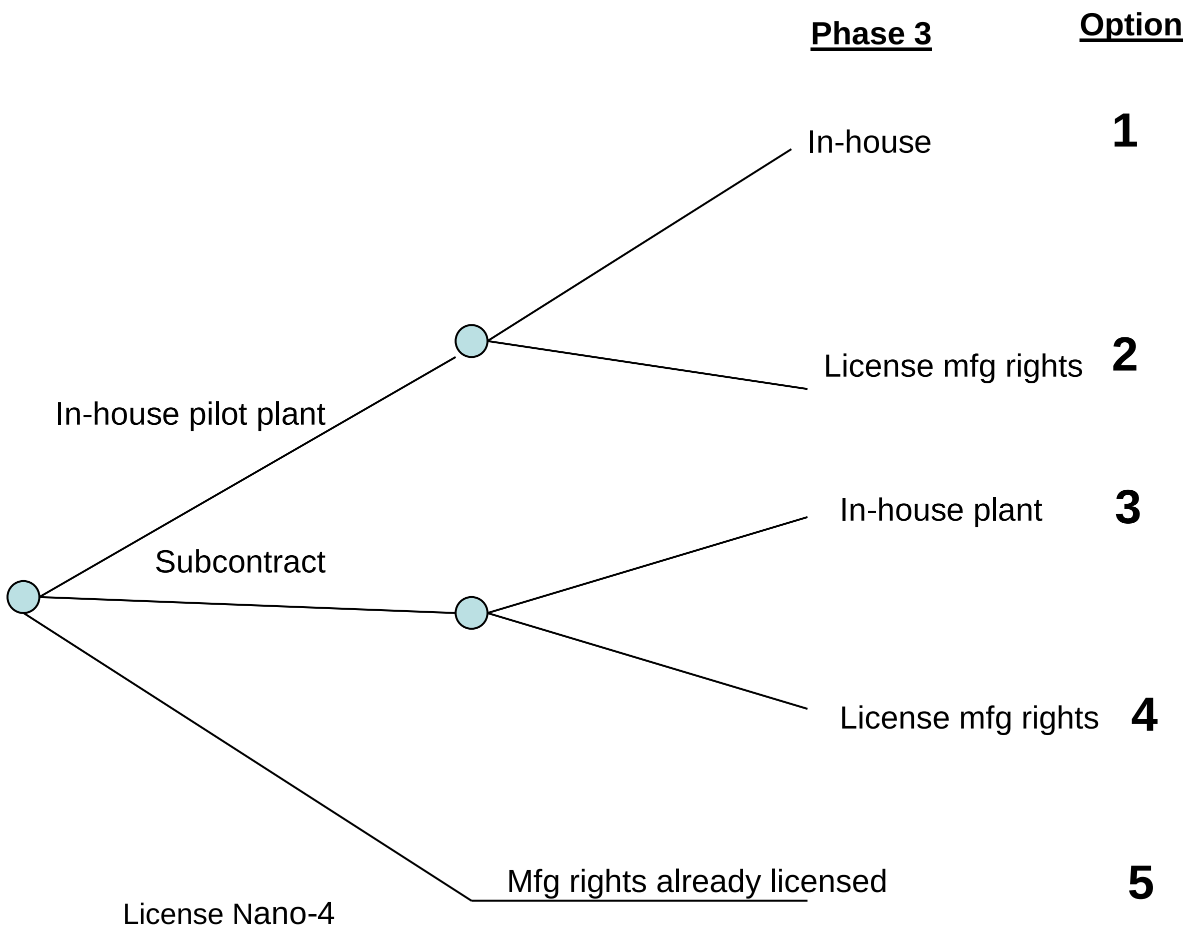
Final Discussion of What Torrey Nano Should Do

After taking the second vote and noting the usual split in vote, I ask, How should Torrey Nano make this decision? What should they base it on? Students often simplify the discussion here around risk and return. I usually try to push them somewhat here. I believe that Torrey Nano's decision hinges on three key questions: 1) What does Torrey Nano really want to be in the long term? 2) How many chances will they get at a home run product? 3) If they will have other chances, are the products in their pipeline more promising than Nano-4? If Torrey Nano really wants to be a big pharmaceutical company and Nano-4 is their best chance, then their decision is easy. They need to develop manufacturing capabilities and option 1 best preserves their option to do so. If they are content to be a research firm and are more interested in longevity, then licensing is the right move for them. It is likely, however, that they are an ambitious firm and that ambition and excitement helps them to attract the talent needed for breakthrough products. If that's the case, then the decision hinges on how many other opportunities Torrey Nano is likely to have. The case doesn't tell us that, so ultimately, we are left with no definitive answer as to what the right decision is and, since the case is disguised, we do not know either the final decision or outcome.

Lessons on Vertical Integration and Real Options

As chapters 6 and 8 point out, there are important issues around opportunism, capabilities, and real options that need to be considered in vertical integration. Vertical integration decisions usually cannot be reduced to easily quantifiable make versus buy decisions. Such an approach in the Torrey Nano case would likely have lead the decision maker to option 3, which promised the highest return. Yet, serious questions arise as to whether the company would have the capability, and thus, the flexibility to build a full-scale plant if they did not develop capabilities by building a pilot plant first. Thus, it is not clear that Option 3 would work in practice given the concerns about opportunism, capabilities, and, especially, options that are raised in the case.

Exhibit 1


Phase 3
Option
In-house
1
License mfg rights
2
In-house pilot plant
In-house plant
3
Subcontract
License mfg rights
4
Mfg rights already licensed
5
License Nano-4

Exhbit 2 Net Present Value Analysis of Torrey Nano Options

	Scenario 1	**Scenario 2**	**Scenario 3**	**Scenario 4**	**Scenario 5**
2018	-5000	-5000	0	0	5000
2019	-3000	-3000	-4000	-4000	0
2020	-33000	-3000	-34500	-4500	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	45000	17500	45000	17500	3750
2026	56000	14000	56000	14000	7000
2027	70000	17500	70000	17500	8750
2028	78000	19500	78000	19500	9750
2029	86000	21500	86000	21500	10750
2030	90300	22575	90300	22575	11288
2031	94815	23704	94815	23704	11852
2032	99556	24889	99556	24889	12444
2033	104534	26133	104534	26133	13067
2034	109760	27440	109760	27440	13720
2035	115248	28812	115248	28812	14406
NPV	**$14,476**	**$2,559**	**$17,048**	**$5,130**	**$8,006**

Assumes discount rate of 30 percent
Cash flow numbers are taken from the tables in the case.

Exhibit 3: Summary of Torrey Nano's Options

	Option 1 In-house I/II In-house III	Option 2 In-house I/II Licensee III	Option 3 Subcontract I/II In-house III	Option 4 Subcontract I/II Licensee III	Option 5 Licensee I/II Licensee III
Financial Considerations	Significant returns from Pilot Plant if Torrey Nano goes into large-scale mfg in Phase III	Lower returns if Torrey Nano does not go into mfg in Phase III	Highest NPV; risk deferred to Phase III	Lower return than Option 5	Better return than option 4
Risk	If Nano-4 or pilot plant fails then Torrey Nano is stuck with plant	If Nano-4 or pilot plant fails then Torrey Nano is stuck with plant	Lower risks in Phases I/II	Lower risk than Options 1-3	Lowest risk and better return than Option 4
Opportunism	Proprietary know-how has maximum protection CRP-I-specific know-how kept inside Torrey Nano	Proprietary know-how protected until more is known after Phase I/II	Opportunism risk: leak of proprietary knowledge Subcontractor develops CRP-I specific knowledge that may be difficult to transfer in Phase III	Subcontractor develops specific know-how on Nano-4 Opportunism issues will be between subcontractor and licensee	
Current Capabilities	Does not currently possess mfg capabilities	Does not currently possess mfg capabilities	Allows Torrey Nano to focus on research capabilities	Allows Torrey Nano to focus on research capabilities	Allows Torrey Nano to focus on research capabilities
Future Capabilities	May help Torrey Nano develop the mfg capabilities needed for Phase III	Less benefit to new mfg capabilities if Torrey Nano does not go into mfg in Phase III	Must start Phase III mfg with green organization; will start from scratch on capabilities	No development of mfg capabilities; will continue to face this same dilemma in future	No development of mfg capabilities; will continue to face this same dilemma in future
Flexibility	Torrey Nano can take advantage of upside if Nano-4 shows high potential	Torrey Nano can act on the information it has gained in Phase III	"Green organization" is a big risk to pull off large-scale mfg		No flexibility if CRP-I is a hit

Collusion in Major League Baseball: Teaching Note

Objectives and Position in Course

Collusion in Major League Baseball (MLB) is a short case that offers students an opportunity to consider some of the fundamental questions associated with collusion in a famous historical case. Essentially, team owners responded to the increasing bargaining power of players with a series of actions that were eventually ruled to constitute collusion. Thus, it is an example of buyer collusion where the owners colluded to depress the wages that they paid for the services of the players. This is not a case that I use for an entire class period. As a short case, it necessarily neglects much of the detail associated with the history involved.

Teaching Plan

I begin with a short discussion of the MLB industry followed by a group activity and debate. My intent with the industry discussion is to reinforce concepts from earlier chapters and to highlight the uniqueness of MLB.

<u>Industry Forces Discussion</u>

I will begin the case discussion with a discussion of the industry to provide students with more context than is available from the short case. I will ask a series of questions like those listed below:

1. How would you describe the industry of Major League Baseball?
2. What is the industry?
3. How would you assess MLB's competitive forces?
4. Why would the owners look to collude at this point in history?

MLB is a rare phenomenon in the U.S.: a legal cartel. If one defines its industry as major league baseball, it has not faced a credible threat of entry since World War I. Question 2, however, will raise the question as to whether baseball is the right definition of industry. Is MLB's industry spectator sports or, even more broadly, something like entertainment. There is no precise answer to such a question, but analysis is usually more tractable with a working definition that leans to the more specific side of the spectrum while treating alternatives as substitutes. Though the case provides little or no discussion of broader industry issues, common knowledge is sufficient to enable most students to discuss bargaining power of buyers and suppliers, threat of entry, and the threat of substitutes. Rivalry within the industry is unique compared to most industries. The teams compete on the field but much less so economically where television contracts, for example, are cooperative. (MLB is different from the NFL, however, in that each team does have local broadcasting contracts that leads to very disparate revenues between large and small market teams.), Resource Analysis of MLB Teams

Unlike the other cases in the book, the level of analysis is largely at the industry level as opposed to the firm. However, it is important to understand the motives of the individual firms, so I will ask students to take a few minutes to consider the VRIO profiles of a team or two. I will generally choose two contrasting teams, one from a large market and one from a small market. The background information for this section will be familiar to some of the students but not all. So, I will rely on a few class "experts" to quickly move through these issues.

1. Let's choose two teams, the Los Angeles Dodgers and the Kansas Royals. How would you rate the two on the VRIO framework?
2. What does a VRIO analysis suggest about the MLB teams' motives?

Both own valuable and rare franchises (although because of MLB policies which allow teams to capture value from broadcasting in local markets, the Dodgers franchise is much more valuable). Both face virtually no threat of imitation from high-level professional baseball teams in their area. Some students may point out that the rareness of the franchises may induce cities to compete for these rare franchises as we have seen with the recent movement of teams in the NFL. Cities respond by subsidizing stadiums, which allows teams to create and capture value from such franchises. Both have the complementary resources to enhance the value from their franchises. However, because of recent changes in free agency and arbitration at the time of the case, teams faced dramatically increased challenges in appropriating the value created from their franchises, which is another way of saying that the players' bargaining power had increased.

Exercise: Debate on Collusion

One approach that I have found effective for exploring the collusion issues in the case is to set up a debate. I divide the class into at least four groups. The groups are given the following assignments:

Collusion I
Group 1 argues that the owners were guilty of tacit collusion.
Group 2 argues that the arbitrator erred in judging and that the owners were innocent of tacit collusion.

Collusion II
Group 3 argues that the owners guilty of "explicit" collusion.
Group 4 argues that the arbitrator erred in judging and that the owners were innocent of "explicit" collusion

Each group is given 10-15 minutes to formulate their case based on the principles in the chapter and the facts in the case. Group 1 is given 3-4 minutes to present their case and Group 2 rebuts followed by Groups 3 and 4. I ask the students to use concepts from the book to inform their arguments.

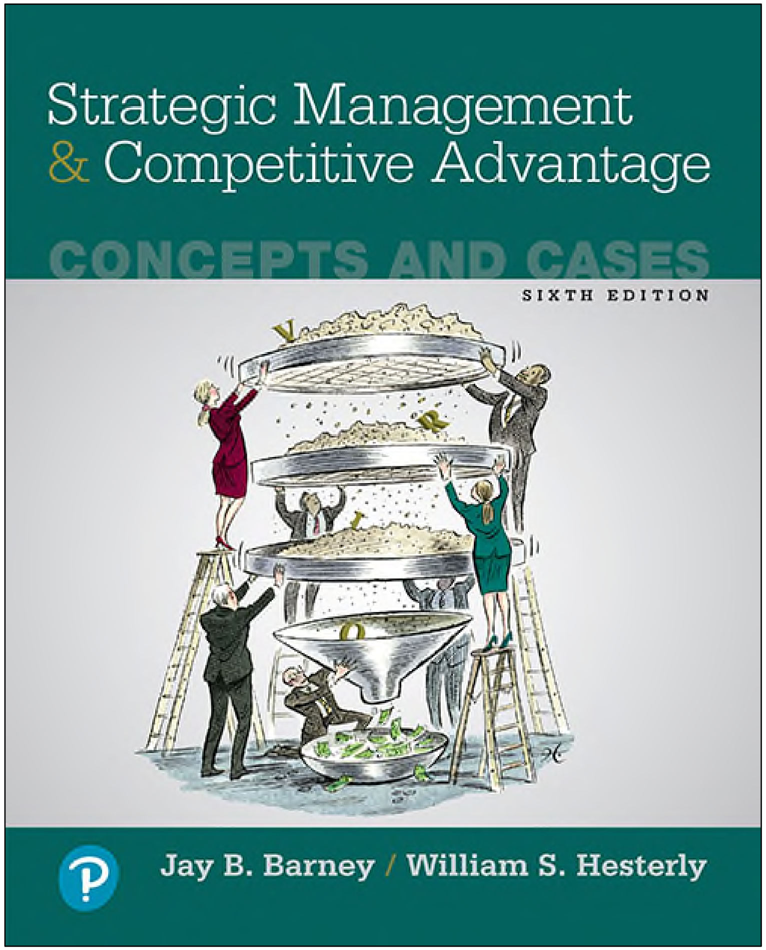
Following the discussion above, I ask the students how the owner's collusive behavior affected economic profits. The case does not present direct data on this question but it does show that the owners did better during this period in capturing value that might have gone to the players. Finally, I address the question of why collusion broke down and ask students to generalize about when these forces that lead collusion to break down are most likely to occur or not occur.

Summary

In a wrap-up of the case, I point out that tacit collusion, almost by definition, is more difficult to delineate than explicit conclusion. I also note the difficulties in maintaining collusion unless special circumstances occur.

Strategic Management & Competitive Advantage: Concepts and Cases

Sixth Edition



Chapter 2

Evaluating a Firm's External Environment

Learning Objectives (1 of 2)

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

2.2 Describe how the structure-conduct-performance (S-C-P) model suggests that industry structure can influence a firm's competitive choices.

2.3 Describe the five environmental threats and indicators of when each of these threats will enhance or reduce the attractiveness of an industry.

Learning Objectives (2 of 2)

2.4 Discuss the role of complements in analyzing competition within an industry.

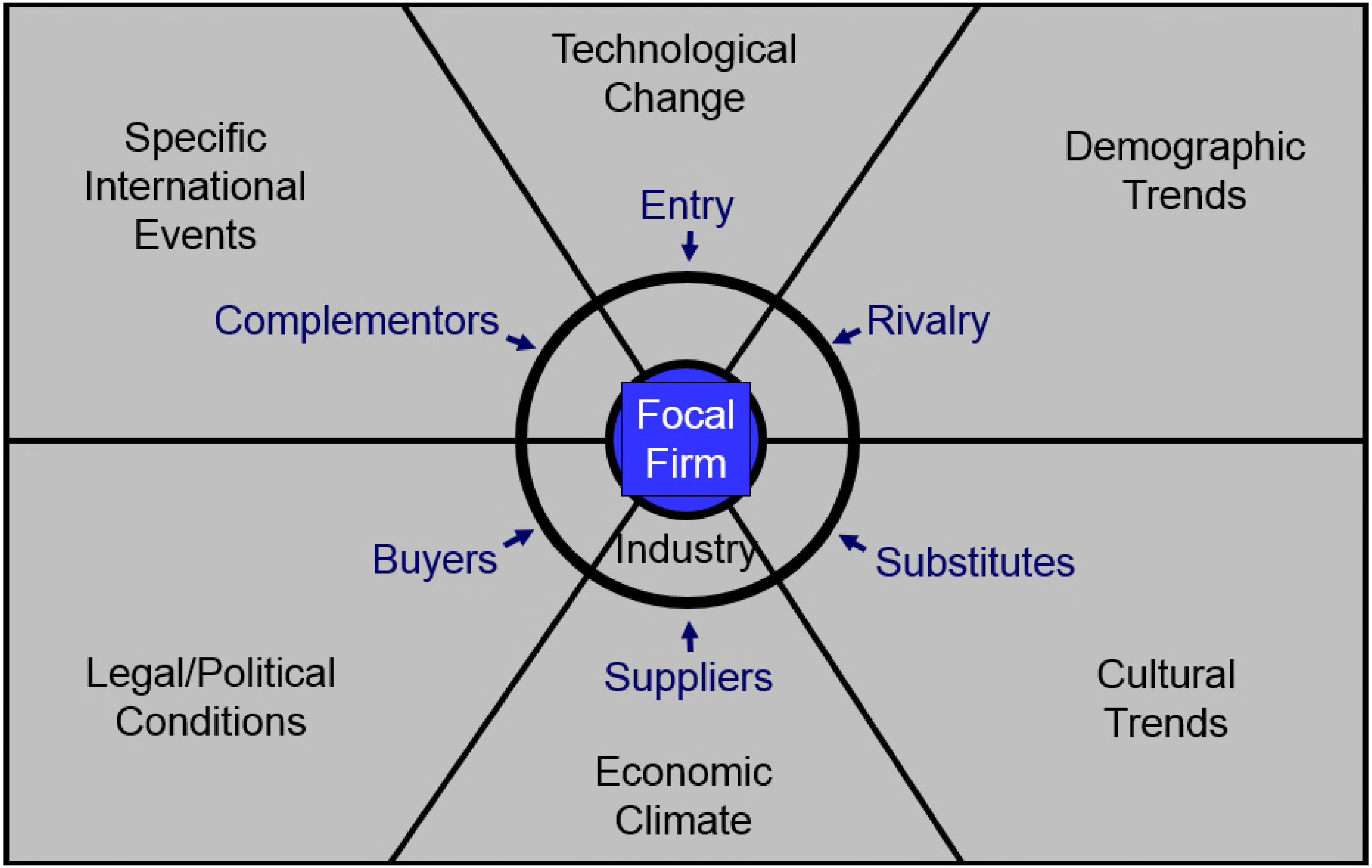
2.5 Describe four generic industry structures and specific strategic opportunities in those industries.

Why External Analysis?

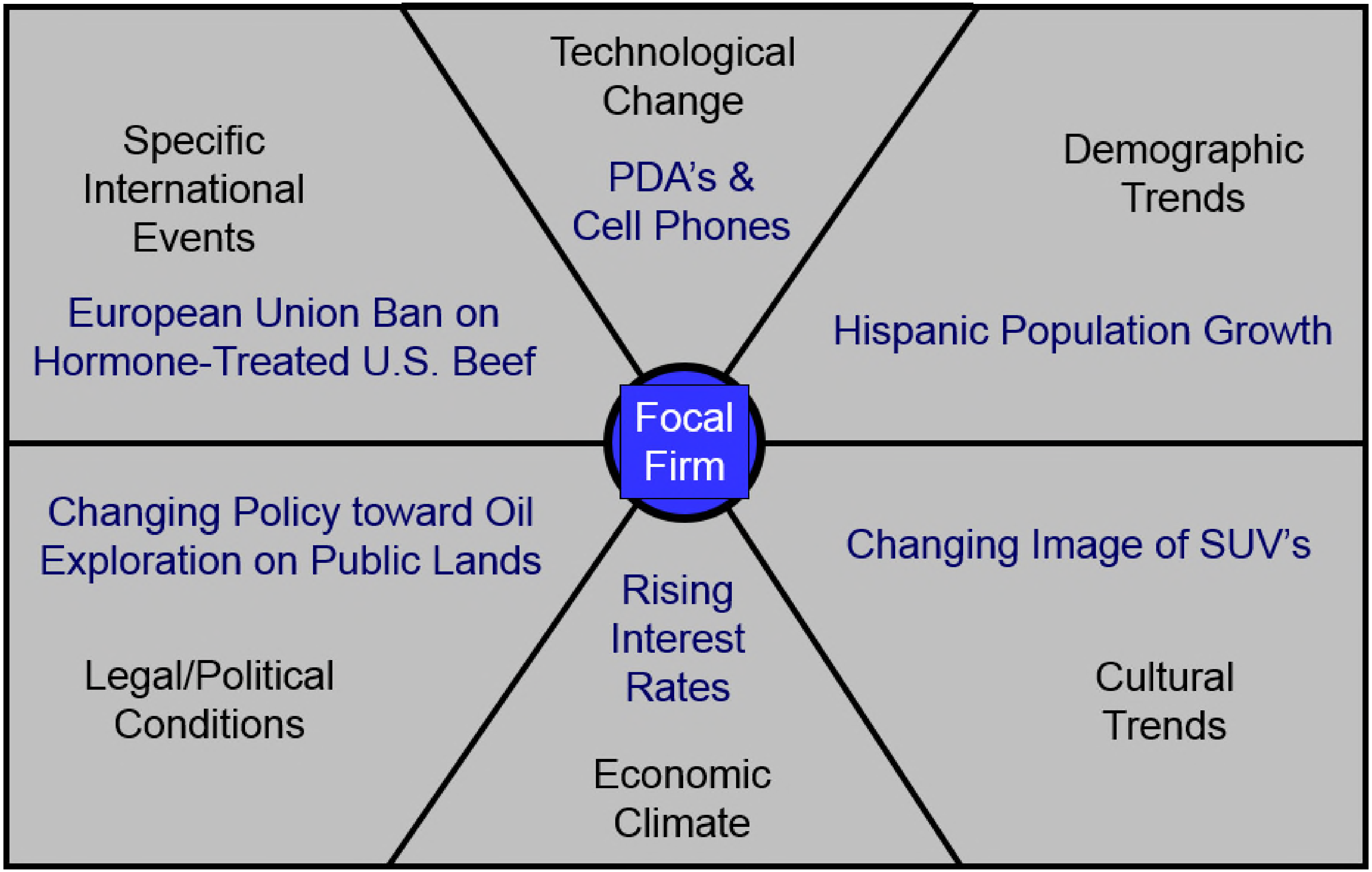
External analysis allows firms to:

- discover threats and opportunities
- see if above-normal profits are likely in an industry
- better understand the nature of competition in an industry
- make more informed strategic choices

General External Environment (1 of 3)



General External Environment (2 of 3)

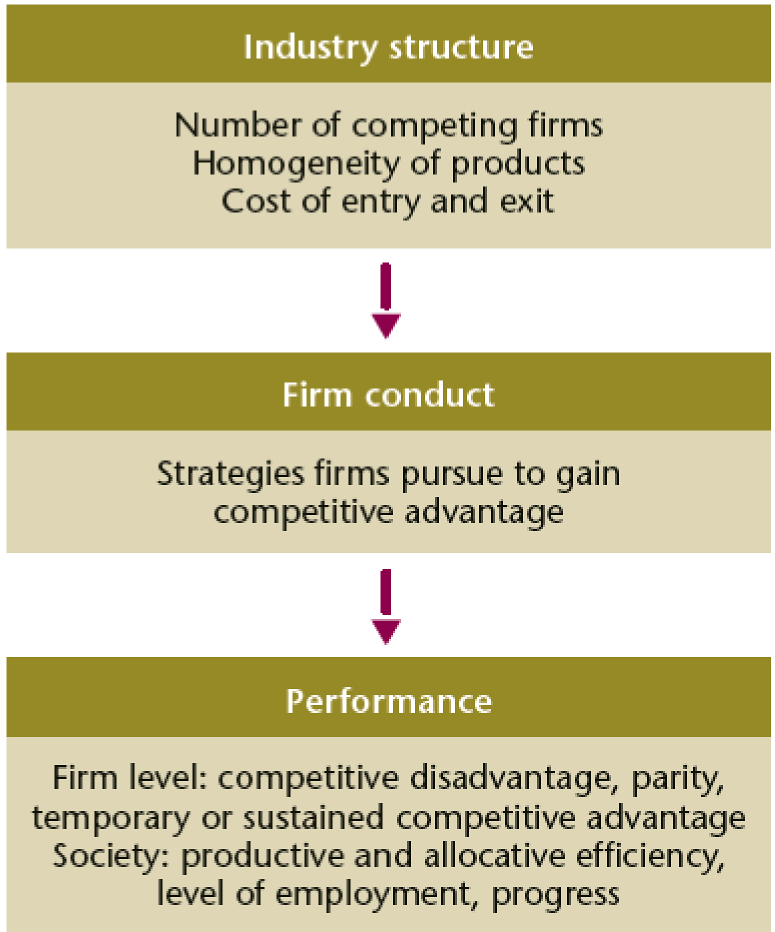


Industry Analysis (1 of 2)

The Structure-Conduct-Performance Model

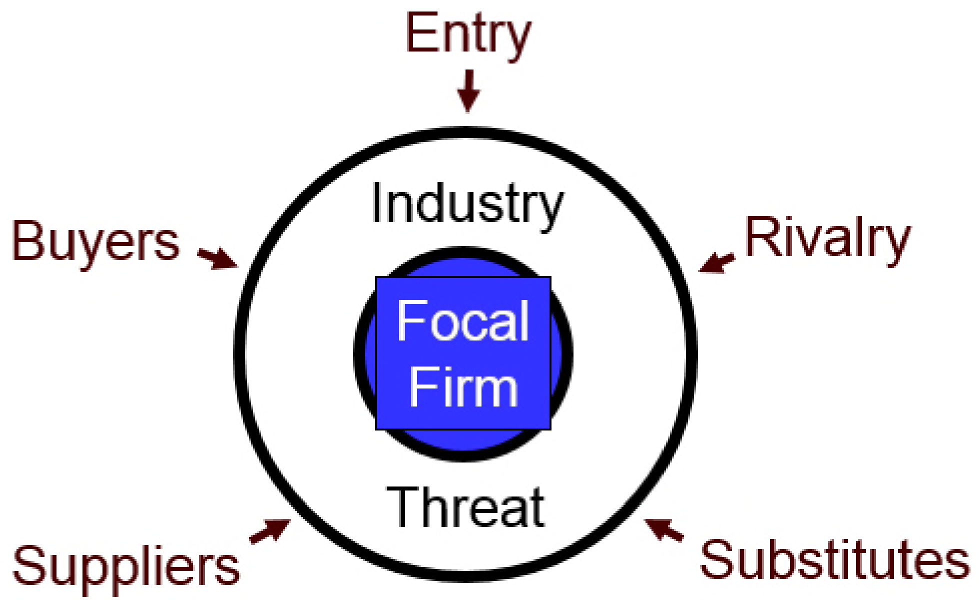
- Originally developed to spot anticompetitive conditions for antitrust purposes
- Came to be used to assess the possibilities for above-normal profits for firms within an industry
- Model of environmental threats was developed from this economic tradition

The Structure-Conduct-Performance Model



Industry Analysis (2 of 2)

The Model of Environmental Threats



Higher Threat → Lower Average Profits

Model of Environmental Threats (1 of 2)

Threat from New Competition

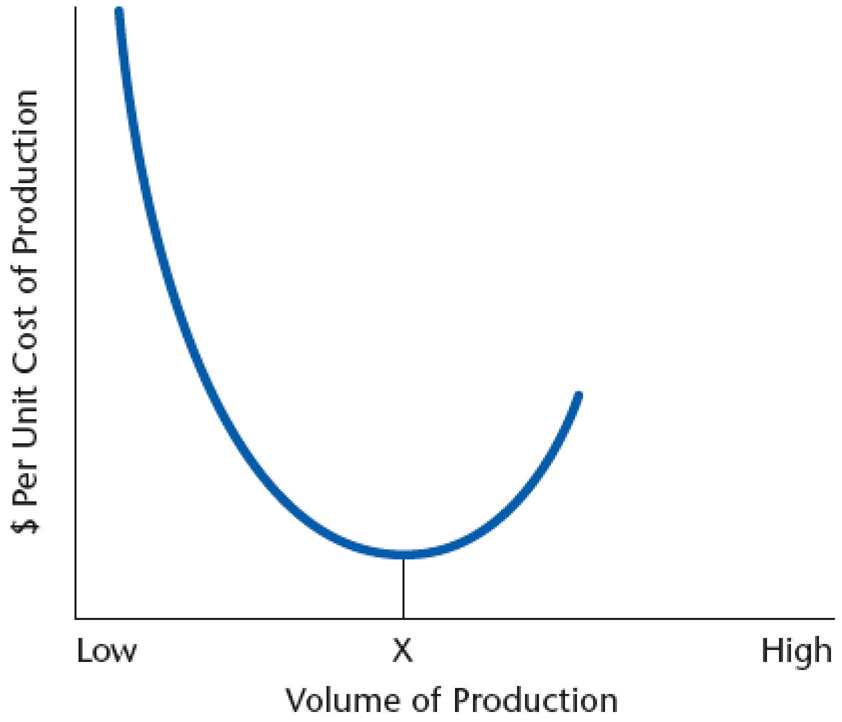
- If firms can easily enter the industry, any above-normal profits will be bid away quickly.
- Barriers to entry lower the threat of entry.
- Barriers to entry make an industry more attractive.
  - This is true whether the focal firm is already in the industry or thinking about entering.

Model of Environmental Threats (2 of 2)

Barriers to Entry:

- Economies of scale—firm that can't produce the minimum efficient scale will be at a disadvantage.
- Product differentiation—entrants are forced to overcome customer loyalties to existing products.
- Cost advantages independent of scale—incumbents may have learning advantages, and so on.
- Government policies—governments may impose trade restrictions and/or grant monopolies.

Economies of Scale and the Cost of Production



Model of Industry Competition (1 of 6)

Threat from Existing Competitors

- Attributes of an Industry That Increase the Threat of Direct Competition:
  - large numbers of competitors
  - slow or declining growth
  - high fixed costs and/or high storage costs
  - low product differentiation
  - industry capacity added in large increments

Model of Industry Competition (2 of 6)

Threat of Substitute Products

- Substitutes fill the same need but in a different way.
  – Coke and Pepsi are rivals; milk is a substitute for both.
- Substitutes create a price ceiling because consumers switch to the substitute if prices rise.
- Substitutes will likely come from outside the industry—be sure to look.

Model of Industry Competition (3 of 6)

Threat of Supplier Leverage

- Powerful suppliers can “squeeze” (lower profits) the focal firm.

Industry conditions that facilitate supplier power:

- small number of firms in supplier’s industry
- highly differentiated product
- lack of close substitutes for suppliers’ products
- supplier could integrate forward
- focal firm is an insignificant customer of supplier

Model of Industry Competition (4 of 6)

Threat from Buyers Influence

- Powerful buyers can “squeeze” (lower profits) the focal firm by demanding lower prices and/or higher levels of quality and service.

Industry conditions that facilitate buyer power:

- small number of buyers for focal firm’s output
- lack of a differentiated product
- the product is significant to the buyer

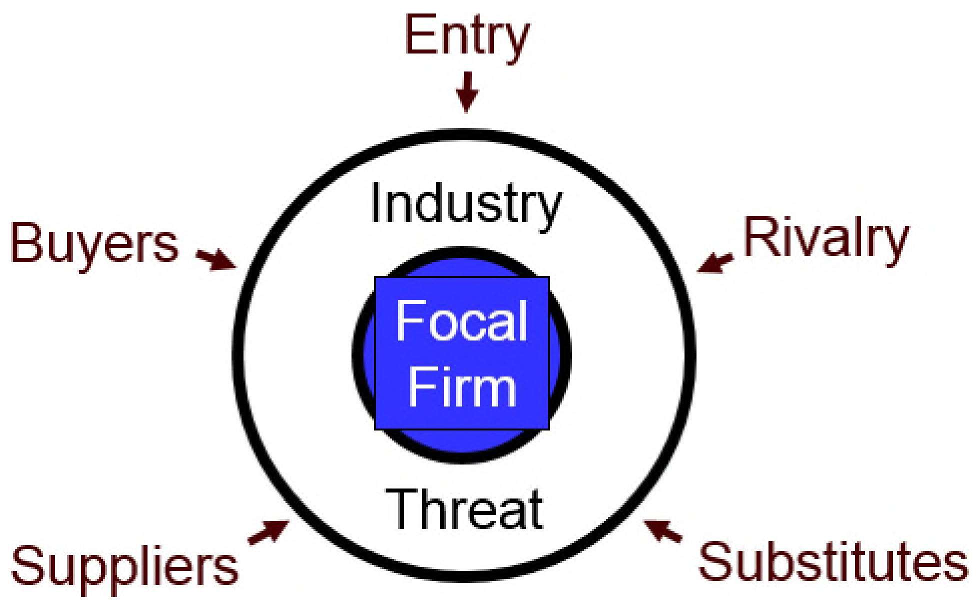
Model of Industry Competition (5 of 6)

Indicators of the threat of buyers influence:

- Buyers operate in a competitive market—they are not earning above-normal profits.
- Buyers can vertically integrate backward.
- Many small buyers can be united around an issue to act as a block.

Example: Monsanto’s Life Sciences Strategy

Model of Industry Competition (6 of 6)



If all threats are high → expect normal profits

If all threats are low → expect above normal profits

Most industries are somewhere between the extremes.

Complementors as Another Force

Complementors Increase the Value of the Focal Firms Product

- Customers perceive more value in the focal firm’s product when it is combined with the complementor’s product.
- Complementors may be found outside the focal firm’s industry.

Example: Michelin Tires on Corvette

Responding to Environmental Threats

Neutralizing Threats

- Most firms cannot unilaterally change the threats in an industry.
- By altering relationships in an industry, firms may reduce threats and/or create opportunities, thereby increasing profits.

Examples: Regional Healthcare System, Building Contractor, and the Bakery

Exploiting Industry Structure Opportunities (1 of 5)

Generic Industry Structures

- At any point in time, the structure of most industries fits into one of the four generic categories.
- Each industry structure presents opportunities that may be exploited.
- Firms can choose to exploit an industry structure, continue business as usual, or exit the industry.

Exploiting Industry Structure Opportunities (2 of 5)

Fragmented Industry Structure

Industry Characteristics

- large number of small firms
- no dominant firms
- no dominant technology
- commodity-type products
- low barriers to entry
- few, if any, economies of scale

Opportunity Consolidation

- buy competitors
- build market power
- exploit economies of scale

Exploiting Industry Structure Opportunities (3 of 5)

Emerging Industry Structure

Industry Characteristics

- new industry based on breakthrough technology or product
- no product standard has been reached
- no dominant firm has emerged
- new customers come from nonconsumption not from competitors

Opportunity

- first mover advantages
- technology
- locking-up assets
- creating switching costs

Exploiting Industry Structure Opportunities (4 of 5)

Mature Industry Structure

Industry Characteristics

- slowing growth in demand
- technology standard exists
- increasing international competition
- industry-wide profits declining
- industry exit is beginning

Opportunities

- refine current products
- improve service
- process innovation

Exploiting Industry Structure Opportunities (5 of 5)

Declining Industry Structure

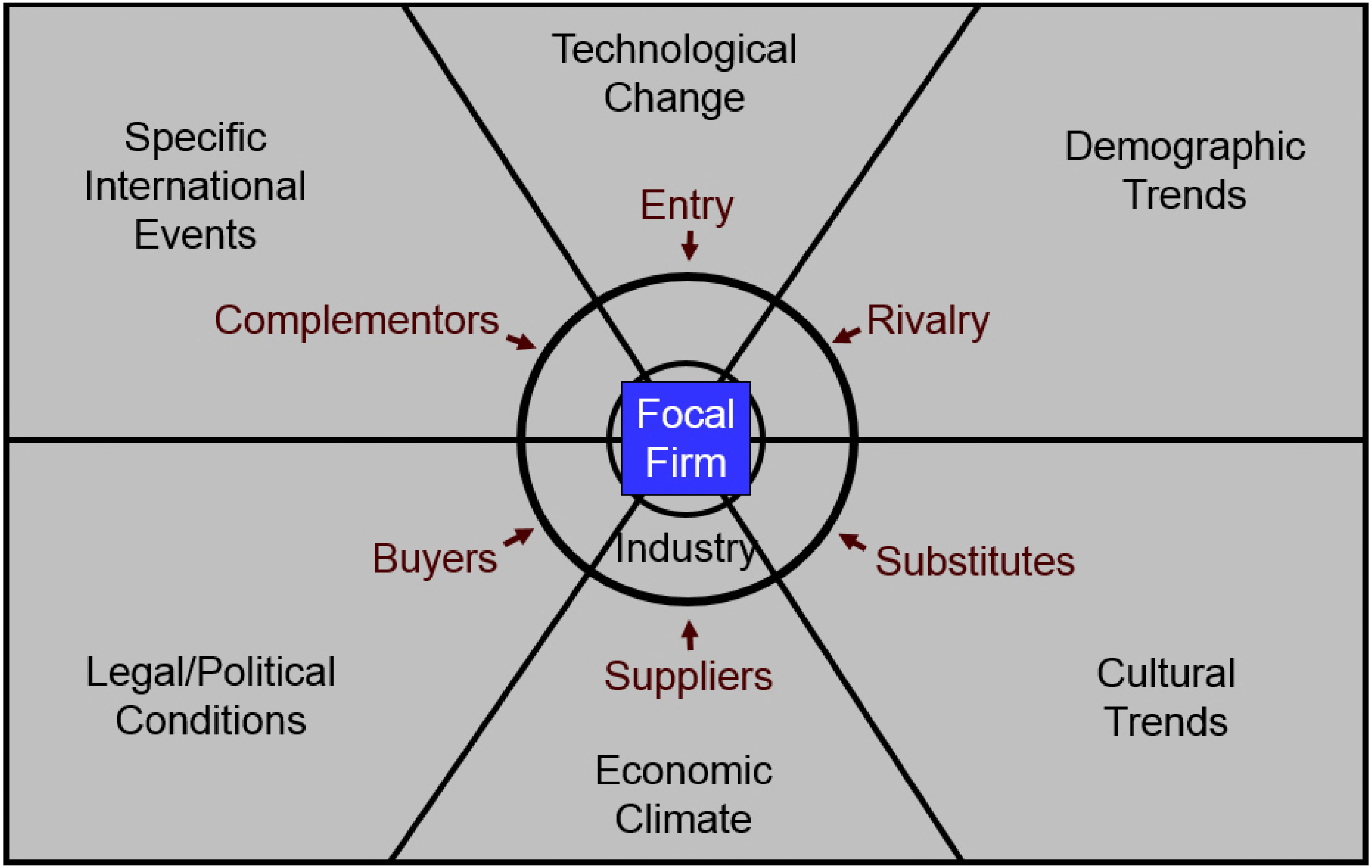
Industry Characteristics

- industry sales have sustained pattern of decline
- some well-established firms have exited
- firms have stopped investing in maintenance

Opportunities

- market leadership
- niche
- harvest
- divest

General External Environment (3 of 3)



Summary

External Analysis:

- takes time and effort
- should include consideration of international markets
- helps firms recognize threats and opportunities
- provides assessment of likely levels of industry profitability (normal, above, below)
- can be applied at the individual level to professional and personal environments

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