Strategic Management for the Capstone Business Simulation® and Comp-XM® and Global DNA®

Michael L. Pettus, Ph.D.

7th Edition

“This text is excellent as a strategic management text which uses the Capstone simulation and cases to explain the linkages of strategic management concepts to real world business problems.”

Joseph Mahoney, Ph.D.
Caterpillar Chair in Strategic Management
University of Illinois
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“If you use the Capstone simulation this strategic management text must be used. No other strategic management text can drive the concepts of strategic management into a real world based simulation.”

Peter Wright, Ph.D.
Free Enterprise Chair in Strategic Management
University of Memphis

Acknowledgments

I would like to thank many people for their hard work and dedication to the construction of this book. First, I would like to thank Dan Smith, founder of the Capstone Business Simulation, for giving me the opportunity to prepare the book.

Second, I would like to thank all the students who spent hundreds of hours word processing this book: Karen Knight and Tim Wiggenbach deserve special recognition. Amanda Walker was especially helpful in the construction of this second edition. Denisa Smaldone was very helpful in the development of the third edition. Victoria Dudleston was instrumental in the constructing of the fourth edition. Kelsey Lee was very important, and made significant contributions, in the construction of the 5th edition. Audra Davis was crucial in terms of assistance of the updated 5th edition. Maddison Harner was outstanding in terms of assistance in creating the 6th edition. Kelsey Armstrong was very helpful in the construction of this 7th edition. Someday all of you will walk with industry giants.

Third, there are two people who were vital to the construction of this book: May Zelner of Capstone Business Simulation and Hans Royal-Hedinger of Millikin University. Without the hard work of these individuals, this book would never have been accomplished. If I were to pick a number of individuals to start a business, May and Hans would be among my ten top picks in the world! Someday both of you will walk with captains of industry.

Fourth, I would like to thank Eddie Schwertz of Webster University for his review of the 6th edition.

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This book is dedicated to all the wonderful professors who use it.

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Inside the Mind of the Global CEO

This article highlights an interview with the CEO and Chairman of the Board of Directors of Caterpillar, Douglas R. Oberhelman. Caterpillar is one of the thirty (30) firms that make up the Dow Jones Industrial Average. The company is viewed by many analysts as a barometer of the health of the global economy.

This interview provides helpful insights into how emerging markets may develop in the future. Oberhelman's responses contain the thought processes and values of a successful corporate leader. His responses showcase viewpoints as well as an agenda for success in important developing markets (e.g. BRIC) and other markets of future importance. Oberhelman discusses not only what markets are emerging but also, how and why firms should conduct business in these emerging markets. This interview provides us a unique opportunity to go "inside the mind" of a truly global CEO.

The person who conducted the interview was Michael Pettus, an Associate Professor of Management at the Tabor School of Business at the Millikin University in Illinois.

Pettus : Why do you think a discussion of strategies for emerging markets is important?

Oberhelman : I could sum it up in one word—growth. The developed markets will continue to be important, but when it comes to new customers and new opportunities there are tremendous possibilities in the emerging markets. Just look at income as an example. For about 10 years, U.S. discretionary income has been flat while worldwide discretionary income has grown like no time in history. The result is higher growth in emerging markets, and lower growth in developed markets.

Pettus : You graduated from Millikin University in 1975 with a degree in finance and then you went to work for Caterpillar. Your first international assignment was in Uruguay. That would not appear to be a usual starting point for a new graduate. Can you tell us what happened?

Oberhelman : I had a choice of living in Argentina or Uruguay. Looking back, it was a tremendous experience, but back then in the early 1980's, both countries were pretty dangerous. They were under martial law and sometimes people would just disappear from those countries and other countries during this time period. In the late 70's, oil prices spiked and gasoline went from about 30 cents a gallon to over a dollar a gallon. The resulting recycling of those petrol dollars around the world had a tremendous impact in Latin America. Mexico was the first country to devalue its currency in 1982 and many other Latin American countries followed. This was the first real currency crisis in emerging countries. I saw many countries go nearly bankrupt, and I saw the impact that had on businesses, communities and individuals.

I learned a great deal about international finance, currency movements, and banking. I remember staying at the Sheridan Hotel in Argentina and every day my rate would go up because inflation was out of control. When I got there it was something like 20 pesos to the dollar; when I left it was more like four million pesos to the dollar. This was similar to the German inflation in the 1930's.

Pettus : A lot of the academic community and practitioners feel that the BRIC countries (Brazil, Russia, India & China) are going to be growth engines for the future. Do you share that view? Whether you do or don't, could you contrast and compare those countries?

Oberhelman: Yes, I do believe that, but I also think that we need to look beyond just BRIC (as a block of countries) and look at each on its own merit. Every one of those countries is completely different. And we shouldn't forget there's another set of emerging countries, and I would put Indonesia right at the top.

When we graduated from college in the 1970's there were probably 3 ½ billion people on the Earth. There were probably only a billion or so living in countries open for international business. Russia was a largely closed market in the 1970s due to the Cold War. India was basically closed. China was completely closed. Viet Nam was just emerging in Southeast Asia from a terrible destructive war situation.

Today, with the seven billion people on the planet, there are probably only 500,000 million that we can't sell due to U.S. government policy. All of these 6½ billion people want to live as progressively and modern as we do. Therefore, multinational firms have many more international growth opportunities today. There are three factors which will be important over the next 15 years: (1) discretionary incomes rising, (2) the growing middle class, and (3) the rapidly growing population.

Most of the growth will be in emerging markets. They are expected to grow three to four times quicker than the developed world in the coming decade, and they bounce back from downturns faster than the highly indebted parts of the developed world. This has just been witnessed from the recent recession.

Every one of those BRIC, plus Indonesia, the Middle East, and a couple countries in Africa will provide firms tremendous opportunities. China's had problems sustaining growth at 12% and they may likely never see that again, but with growth at around 8%, China remains an excellent opportunity. Brazil has stumbled a little bit, but it is a great opportunity. It seems like every year that India is 3 steps forward and 2 steps back. However, it's still a key market.

Russia is a great opportunity, but it's a small country in terms of population (approximately 142 million people) but presents large opportunities from a resource standpoint. The CIS as a whole is about 228 million people. When compared to China, the CIS is small, but in comparison with Brazil, the CIS has a larger population and more natural resources.

As for the Middle East, Caterpillar has had a long-term presence. We have dealer relationships of more than 60 years, a Caterpillar Marketing and Product Support organization in territory, and the recently opened parts distribution center in Dubai to better serve our customers in the region. Despite some political turmoil in this region, there are good reasons why we believe in sustainable growth. This region has important natural resources, a young population and huge consumer needs. For example, with the relative high oil prices, the region is running a high current account surplus. About 40 percent of the world's crude oil reserves are controlled by countries in the Middle East.

To keep pace with the growing population as well as an increasing urbanization, especially in countries like Saudi Arabia, the UAE (United Arab of Emirates) and for that matter also Africa, these countries are increasingly directing funds towards infrastructure development with a focus on education, healthcare, transportation and power generation. Our product range is well suited for the region as it has important needs for infrastructure such as road, irrigation power networks and boasts a significant oil and gas activity – all segments we play in.

So when you talk about emerging markets, it's really a country by country analysis. Every one of those countries has different problems and challenges but great opportunities in the future.

Pettus : You mentioned Brazil, can you talk a little bit about that?

Oberhelman : In the 80s, military-controlled Brazil was deep in debt crisis. Today, Brazil is a modern, but still an emerging market. Firms in Brazil have had their balance sheets completely restored and they have positive reserves. These firms' currency strengthened during the early 2000s until the global recession hit. But there are about 200 million people there and the political system has been relatively stable now for about 10 years. Growth is occurring. There are a number of activities occurring in Brazil, such as the Olympics and the World Cup games, which provide additional opportunities. Brazil is becoming a much more developed market. However, a great deal of infrastructure investments will be required to support these developments.

Pettus : I think that China may be a step or two ahead of the other emerging markets based upon the fact that they've got infrastructure already in place. Virtually everybody that I talk to wants to establish a position in China.

Oberhelman : Earlier this year (2013), I met with the Premier Li Keqiang, about half his new ministers, and other vice ministers. I was pleased with what I've heard. They've really reformed government. China is going to be a force to reckon with for a very long time. Today Caterpillar has about 100 competitors inside China and at least a handful of those aspire to expand beyond China and compete in international markets (including the United States). And I would say that every big multi-national company from around the world will have greater competition from these firms.

Pettus : How much infrastructure is in place within China?

Oberhelman : We've seen rapid infrastructure development, and there is still much more to come. The rate of urbanization in China has essentially doubled in 30 years. The forecast is that in the next 40 years it will go to 80%, which would be similar to Europe and North America. If that happens, that's another 400-600 million people going into urbanization. An intensive infrastructure will be needed to develop and support this growth. While there has been a lot of development in parts of China, the infrastructure in the Western part of the country looks like the U.S. in the 1950's.

Over the next 15 years China is forecast to build 5 million new buildings and 50,000 skyscrapers, equivalent to building two cities the size of Chicago every year. The massive migration from rural areas to urban areas will create multiple mega-cities with populations exceeding 25 million, and many more with populations exceeding 1 million. These megacities will be home to China's growing middle classes, creating consumer markets larger than today's Japan and Spain, respectively. In China, the number of urban middle class households will quintuple. China has the potential to revolutionize mass transit. It already has plans for building new metros, highways, and high-speed trains in its top 170 cities. This represents massive opportunities for developers and construction companies. In addition, massive increases in demand for electricity will be driven by this growth, requiring investments in coal fired, hydropower, nuclear, wind powered, and renewable energy sources.

Pettus : In the emerging markets, is the government a constraint or an accelerator?

Oberhelman : As an example, in my experience in China the government is open for investment. But, we've worked for many years on building relationships. To be successful, you have to find a way to communicate with, or work with the government.

We’ve had a similar experience with the Brazilian government, and really, most emerging countries. As I said before, every country is different, but they often try to protect their domestic markets in three ways: : (1) Many of these countries don’t always want foreign investment, (2) they often restrict foreign investment, or (3) they don’t want foreign imports. It can be a challenge, but just like we do here in the United States, we try to educate on the benefits of open trade.

Pettus : There has been a recent development in Venezuela, Do you think the death of Hugo Chavez will help or hurt our relationship with that country?

Oberhelman : Yes, I think it will definitely help, but it’s going to take some time. I think their biggest challenges come in managing their huge oil reserve. The new government must use this resource to support the Venezuelan people. I believe that this will happen.

Pettus : How do you think the Chinese government views the US?

Oberhelman : Well I think they view us a lot like we view them—they see the opportunities that can come from working together, but they are skeptical. For example, they admire the American entrepreneurial system but they don’t like capitalism. I clearly think their goal is to be the primary world power in the future, and they are prepared for the long haul. At the same time, I think they are very worried about social problems inside China.

And they’ve got to be very cautious how they manage their economy. Frankly, I don’t know how you can centrally control an economy that will essentially double in a relatively short time frame.

I think U.S.-China relations will continue to develop, but it’s going to be gradual. Our two countries need each other, so we need to find a way to manage the relationship—socio-economically, politically and militarily.

Pettus : How about with India, is that a different kind of challenge?

Oberhelman : Completely different. I don’t see India challenging the U.S. or China as a competitive power. They have a great educational system. However, there is a significant social system inside India that holds them back.

Pettus : How about Russia? How would they view the U.S. government?

Oberhelman: It’s a complex relationship. Russia still wants to see itself as a superpower, though it doesn’t have the economic power and the population to be one. There is still a lot of suspicion, but on the other hand, it is a dynamic economy with a lot happening and with a huge potential. We see a lot of opportunities for trade and business. And that is what brings countries together. The more investment, business and social ties we can create between both countries will be a tremendous benefit for both countries. And that will help us learn to work together.

Pettus : Do you see the CIS as an integrated block?

Oberhelman: The CIS is pretty much what it says, a number of independent states who cooperate in some fields, but can pursue totally different policies in other fields. It is certainly not as integrated as the European Union is today.

Pettus : That’s going to make it a lot tougher then.

Oberhelman: The Russian Federation is the largest country in the CIS and the relation between Russia and the other CIS-members is also complex. I do not see a consensus to go beyond the current cooperation in intra CIS trade.

Pettus : How does the Brazilian government view the U.S.?

Oberhelman: I think the view is favorable. They want to be a primary trading partner for the United States. I think they respect our system and like what we've done.

Pettus : How did Caterpillar build the international infrastructure they have now?

Oberhelman : Post-WWI & II, the world needed infrastructure and we were about the only firm who had the equipment to build it. So we had a name and we had distributors all over the world. We started constructing plants overseas and this development has continued for decades. This construction is really in the DNA of our company. This is important because 2/3 to 3/4 of our business is outside the U.S.

Pettus : Do you see that percentage increasing?

Oberhelman : I think that percentage is probably about where it is going to stay.

Pettus : How do you see outsourcing?

Oberhelman : Well, outsourcing has an unfair negative connotation … everybody has outsourcing. Firms generally outsource because it is not a core competency which they have.

Pettus : Do you have assets in highly volatile countries like North Korea and Syria?

Oberhelman : Countries like Syria, North Korea, Iran and Cuba do not have political stability. Even if we weren't prohibited from doing business in these countries – which we are per U.S. export control and economic sanctions laws and regulations – political stability is a big risk factor that we consider when we look at investing internationally in markets which are volatile.

Pettus : One of the things that you did is you bought a pretty large company in Milwaukee. How has that helped your international posturing?

Oberhelman : We purchased a mining company called Bucyrus. You could find Bucyrus equipment in virtually every mine on the planet. From Zambia to Australia to Madagascar to Canada to the US – you name it – they are there. You can also find Cat equipment in those same mines. We didn't necessarily expand our footprint with that acquisition, but we expanded our product line. The Bucyrus products really complemented our mining business.

Pettus : Do you look at industries first or countries first?

Oberhelman : Industries. When I became CEO almost four years ago, we updated our corporate strategy. A big part of that involved looking at the industries we are in. We tried to identify highly attractive industries and allocate our resources accordingly. That's where you start.

Pettus : Do you have your own people who do that on a country by country basis?

Oberhelman: We have a tremendous strategic team at Caterpillar that looks at industries and countries—all while considering the needs of our customers. Most of the issues we address start within our internal team, but we also use some external advisors.

Pettus : What would you like me to tell the academic community? The topic is "success in emerging markets" – if you could just tell us one thing.

Oberhelman: Nothing beats actually traveling to the emerging markets we are talking about. Call on or visit a university and talk to their professors and maybe spend a semester there. That's what I tell our people here about international markets: don't tell me about it if you've never been there. If you're going to teach students about Brazil's economy – go down there and see how business is done..

Pettus : I guess the only market that we haven't talked about is Southeast Asia – do you have any thoughts on those markets?

Oberhelman: Yes, I've mentioned Indonesia is a strong market. There is vast demand for infrastructure projects in Indonesia, and the Indonesian government has issued a new economic "master plan" with an emphasis on infrastructure projects. Indonesia's ports are overstretched, its electrical grid inadequate, and its road system is one of the least developed in the region. The government has pledged US$150 billion on infrastructure spending in the next five years, although two-thirds of this figure is expected to come from private investors.

From a market perspective, Thailand, Vietnam, and Malaysia are also emerging markets. When China's strengthens again, these markets are going to be favorable places to invest.

In addition, Myanmar is a growth market. Their population of more than 60 million is buying everything from cell phones to bulldozers.

Pettus : Have we missed anything?

Oberhelman : We've missed Africa. But do you know who hasn't missed Africa? China. China is very actively and purposefully seizing the opportunities in Africa. Many African countries have tremendous mineral and energy resources. And they are starting to realize that money invested in these industries will benefit their own people.

China is short on resources, so they are looking at Africa as an opportunity. We are seeing all kinds of Chinese investment, Chinese equipment, Chinese money, and Chinese workers going to Africa to develop it. It should be very healthy for Africa, and for China. I'm not sure how healthy it's going to be for U.S. We are missing opportunities. As an example, we are starting to see some significant infrastructure development within Africa.

Six of the 10 fastest growing countries in the world are in Africa (measured in GDP growth between 2010 and 2016). Gains are to be expected across the board: banking and finance, consumer goods, natural resources, agriculture and infrastructure. In 2012, South Africa launched a $430 billion, 15-year National Infrastructure Plan with 18 specific integrated strategic projects for transport, energy, water, and sanitation, with aims to create jobs, green the economy, and strengthen the delivery of basic services. South Africa aims to unlock mining development in Limpopo, North

West, and Northern Cape provinces.

There is also the trans-Algerian highway which will run 1200 km across the north of Algeria, from the border with Morocco in the west to the Tunisian border, passing through 24 provinces. In addition the Algerian government has earmarked a budget of $15 billion dollars for expanding the country's railway and road transport infrastructure over the coming five years.

These are just a few examples, but Africa is definitely making some progress.

Pettus : Are we behind in Africa?

Oberhelman : We (the U.S.) aren't behind—we aren't even in the game. I understand that Africa has a lot of instability. We aren't in the game because a lot of it is political risk, and our government is disjointed in its approach to Africa. It's risky. But Caterpillar has been involved in international markets for years. In Africa in particular, we can build on a great legacy of 24 dealers with an average of about 50 years Caterpillar experience.

And fortunately, in many cases, other U.S.-based businesses have been able to get in early and gain a foothold, which is important. It's much easier to establish relationships and gain customers early on when you don't have many competitors. It's much more difficult when you are late to the party. Right now, China is establishing relationships and gaining customers.

Pettus : Anything else that you would like to tell the academic community?

Oberhelman : Yes, I have come to the conclusion that there are not enough Americans that really understand emerging markets. I admire you for taking this on because the emerging markets of today are significantly different than they were even five years ago. Growth is occurring like we've never seen in this country (U.S.). It's just happening everywhere – the internet has opened it up; the accessibility to capital has opened it up.

Students that graduate from college today better understand there's competition in emerging markets. And emerging markets are in every corner of the world! I can't stress enough the importance of learning about these countries, understanding what drives them and even more importantly appreciating the opportunities for everyone if we learn to work together.

Chapter 1

Managing Environmental Turbulence

Learning and Assessment Goals

1. Understand why we moved into a recession within the U.S.

2. Understand why a global recession has occurred.

3. Understand the role the U.S. Government is playing to improve economic conditions with its economic stimulus plan.

4. Understand the economic state of affairs as of 2015.

5. Understand, at the firm level, how to grow in turbulent economic environments.

6. Understand how firms can maintain competitive positions in times of economic turbulence.

This book is about strategic management. It has two fundamental objectives. First, to integrate all content from your discipline specific courses. This text will provide you with knowledge to be able to understand how these content pieces are integrated between themselves. Second, this text will show you how to use this integration, to establish competitive advantage over time.

Strategic management is defined as the ability to achieve competitive advantage over rivals over time[1]. To understand how this competitive advantage is achieved over time, we use a business simulation. Simulations provide a risk-free environment in which to make strategic decisions in response to changes in customers, competitors, and the environment. The book is designed to explain strategic concepts and to show how these concepts are integrated over time. This is the only complete strategic management text designed to be used with the Capstone simulation. The flow chart on the next page shows how the textbook integrates the Capstone simulation over time.

Figure 1
Strategic Management for the Capstone Business Simulation

THEORY

Chapter 1	Chapter 2	Chapter 3
Managing Environmental Turbulence	Industry Analysis and Industry Evolution for the 21st Century	Utilizing Internal Analysis to Build Competitive Advantage Over Rivals

PRACTICE

Simulation	Simulation	Simulation
1) Understand how to conduct an environmental assessment **2)** Understand how to conduct this assessment over time **3)** Understand decision making to changing conditions over time	**1)** Using the electronic sensor industry as an example, an industry analysis will be conducted. **2)** Understand industry evolution.	**1)** Integrate decision making across all functional levels of the firm. **2)** Understand the impact of these decisions upon performance

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Figure 1
Strategic Management for the Capstone Business

Simulation (continued)

THEORY

Chapter 4	Chapter 5	Chapter 6	Chapter 7
Business Level Strategy	Game Theory, Labor Negotiating and Competitive Dynamics	Analysis of Markets and Positioning	Growth by Internal Development

PRACTICE

Simulation	Simulation	Simulation	Simulation
1) Understand how firms create competitive advantage **2)** Understand competitive dynamics	**1)** Understanding sales forecasting 2) Understand decision making when faced with different outcomes important to different shareholder groups	**1)** Understanding sales forecasting **2)** Understand the application of marketing variables	**1)** Understand how to design internal development strategies **2)** Understand how internal development strategies are implemented.

Figure 1
Strategic Management for the Capstone Business Simulation (continued)

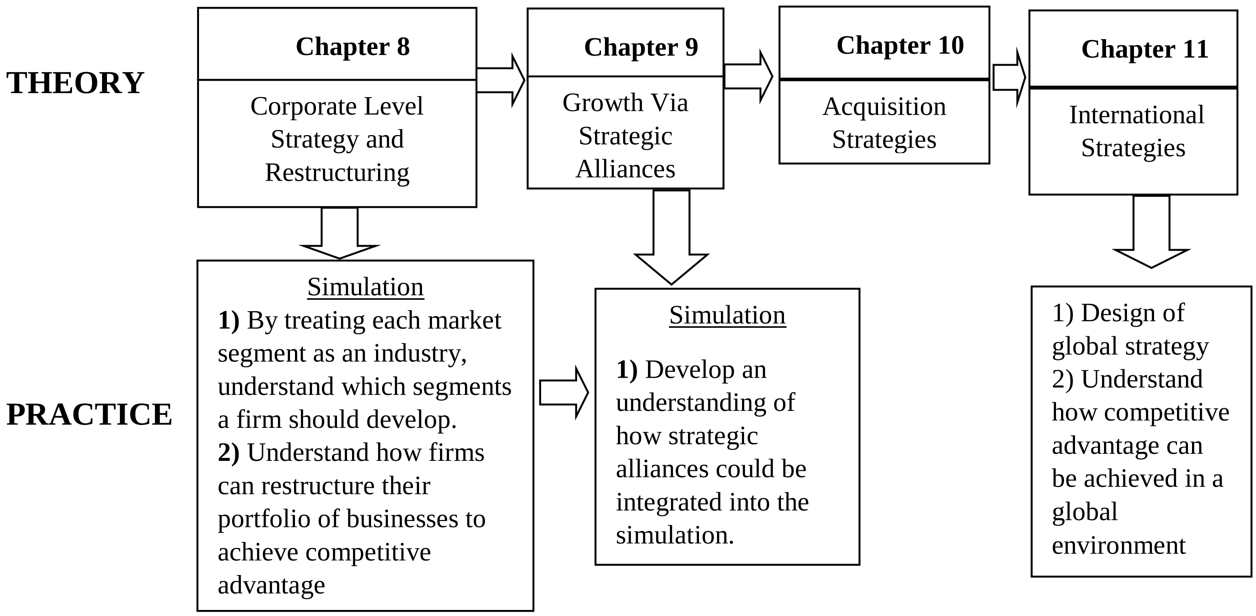
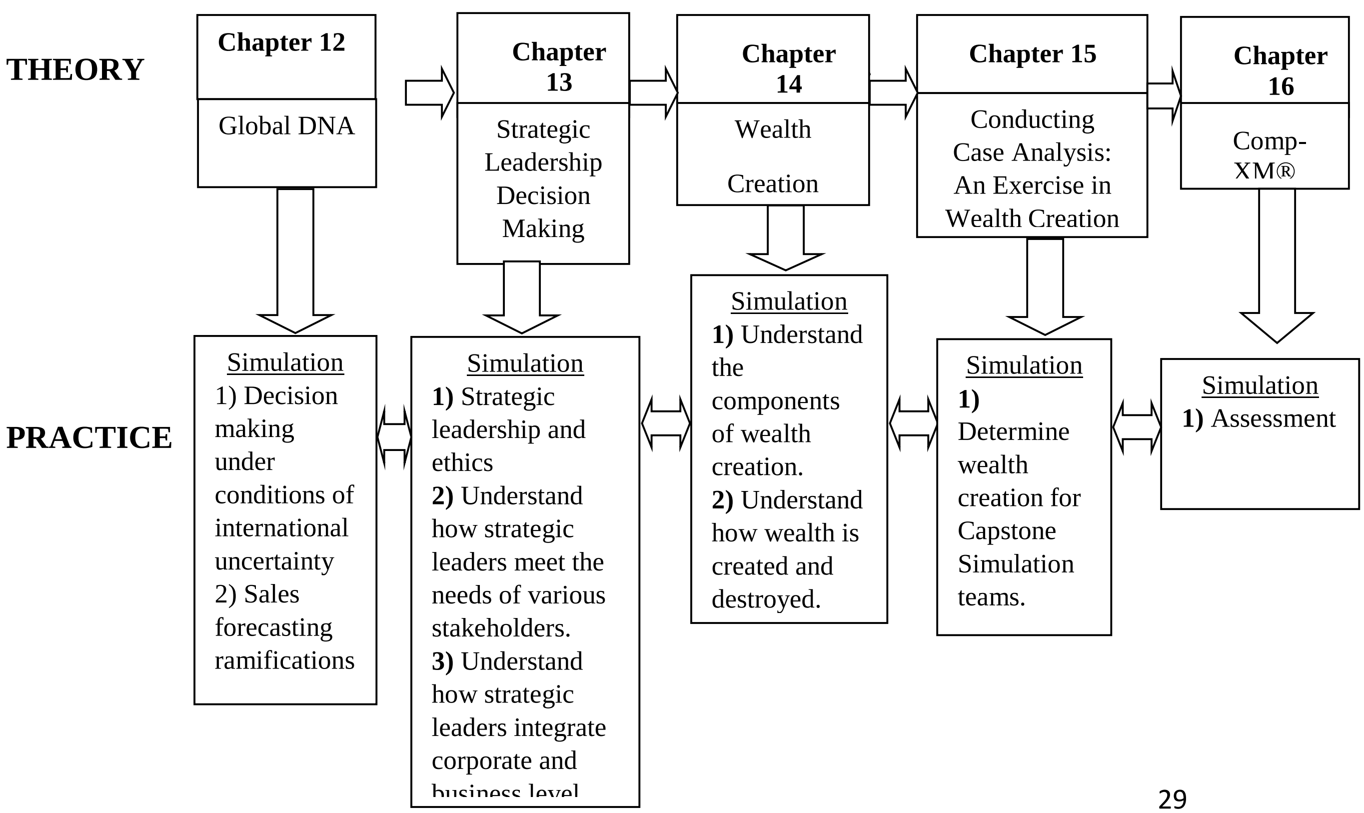


Figure 1
Strategic Management for the Capstone Business Simulation (continued)



For decades strategic management textbooks have been focused upon translating theory into practice. A key concept is viewing strategic management as streams of decisions over time[2]. This dynamic component is important because firms do not make static decisions. In addition, a firm's environment change over time. As such, a firm's strategy must evolve over time. Dynamic firm decision making is required for firm growth in the long run.

In general, the Capstone simulation, is based upon decision making over time. The simulation begins as an industry moving from a regulated to a deregulated environment. The transition of an industry from a regulated a deregulated industry represents a "Schumpeterian shock[3]" The simulation uses a "hypothetical electric sensor industry" as the industry which has been deregulated. **Chapters 1 and 2** of the text are focused upon managing environmental uncertainty and conducting industry analysis under changing conditions.

While a clear understanding of the industry the firm is competing in is of significant importance, a firm's relative position via competitors is of crucial importance. The firm uses its resources and capabilities to achieve and sustain a competitive position within the industry. Resources and capabilities provide the basis upon which the firm's builds competitive advantage. It is not the resources and capabilities themselves with dictate competitive advantage, it is how these recourses and capabilities are used which allows the firm to grow and sustain advantages over time[4]. **Chapters 3 & 4** address this important topic.

The U.S. economy is gradually moving towards economic recovery. However, this recovery has been very slow. The recession hit the entire global community hard. Emerging markets have been growing more quickly than fully developed economies. One reason is because many developing markets have many industries which are state owned. By "state owned," I mean that the primary stakeholder is the government.

With one decision maker, it makes it easier for firms in an industry to do business because price and profits are government controlled[5]. The government of these markets can also prevent competition from outside the industry by maintaining barriers to entry.

A topic which has not been fully developed in many strategic management texts is how the firm can develop accurate sales forecasting in the current time period and beyond. The simulation shows why this concept is important. If a firm sales forecast is too aggressive, the firm will generate excess inventory. Excess inventory leads to higher inventory carrying costs. Higher carrying cost can lead to emergency loans. These loans must be paid back which could hurt financial performance (eg. net income) in the year in which the loan was incurred and in future years.

Sales forecasts which are too pessimistic lead to customers lost customers. The firms' customers may buy product(s) from competitors who can meet their demand.

In addition, a firm's knowledge of strategic industry factors in all segments is of crucial importance. The simulation refers to these factors as key buying criteria. An understanding of these factors is important in the current time period, but also as the industry evolves over time[6]. The firm must build resources and capabilities to serve market segments in the current time period and over time based upon accurate sales forecasting.

The firm has many stakeholders. One group of stakeholders could be the firm's collective bargaining organization. Competitive dynamics helps us to understand the strategic decisions the firm makes over time. These decisions have a direct impact upon the financial indicators of the firm and its competitors over time. This analysis is the foundation of the firms and competitors position over time. This discussion is reviewed in **Chapter 5, Game Theory, Labor Negotiating and Competitive Dynamics.**

Chapter 6, Analysis of Markets and Positioning. A central concept which in discussion is sales forecasting. Without relatively accurate sales forecasts, a firm will not be able to implement its designed strategy. It is also important to understand critical components of marketing because it is these components which interface with the existing and future customer base.

Firms have four general options in terms of how they can grow: **Chapter 7- Internal Development, Chapter 8- Corporate Level Strategies and Restructuring, Chapter 9- Strategic Alliances, and Chapter 10 Acquisitions**. The primary focus of the simulation is upon growth by internal development. Strategic alliances and acquisitions are discussed in **Chapters 9 and 10**.

The simulation has begun to incorporate international development. This is quite important. Of the 30 companies which make up the Dow Jones averages, most generate more international revenue than domestic revenues. International strategies are discussed in **Chapter 11**. **Chapter 12: Global DNA** discusses how international strategy can be successfully implemented in various global environmental conditions.

The simulation has incorporated the important concept of ethics. Firms have many stakeholders and each of the needs of these stakeholders must be met by a firm's senior management team. How the needs of each stakeholder group can be met ethically is discussed in **Chapter 13**. A key takeaway from the chapter is that if senior managers are attempting to maximize their own wealth, this takes time away from meeting stakeholders' needs.

In general, this means that a firms' wealth creation **Chapter 14** is not being achieved. The text addresses wealth creation from a modified balanced scorecard perspective. A key limitation of the balanced scorecard is that it's focused upon historical financial performance. These indicators do not necessarily predict future performance. The following elements of the balanced scorecard are discussed: (1) shareholder wealth (2) customer wealth (3) employee wealth (4) positioning for future wealth.

The simulation is a crucial aspect of any students learning. It examines the growth and profitability of a firm in a competitive setting over time. Case study analysis is also important because students must understand what will happen to a specific firm over time. Cases provide a rich and detailed history of how a specific firm has grown revenue and/or (profit)/(losses) over time. **Chapter 15** provides a guide which includes how a case analysis could be conducted. While your professor will provide you with specifics, the chapter provides general aspects of case analysis which may be important.

The founder and CEO of the simulation has been on the Board of Directors of the AACSB. In his role, he has focused upon "assurance of learning" from a student perspective. "Assurance of learning" is a concept which is difficult to measure. His firm developed COMP-XM as an assessment vehicle to measure "assurance of learning". **Chapter 16** is the COMP-XM chapter in the text. The examples used are taken from actual simulation rounds. The questions at the end of the chapter are designed to provide for "assurance of learning" as has been discussed by the AACSB.

This completes the overview.

We live in a chaotic, changing world. The economic ramifications of 2007-2010 have had a negative economic impact on most emerging and fully developed countries throughout the world. The United States has been very significantly impacted by this economic downturn. Some economists believe that the 2007-2010 time period represented a depression rather than a recession.

Are the 1930's depression conditions upon us during 2007-2010? The Great Depression of the 1930's may have a more modern version. This chapter will address ways of dealing with current economic conditions. If firms are to be successful in current economic times, a number of decisions will need to be made which address conditions specific to modern times. The first question that needs to be raised is, "Are we in a depression or a recession?" In the United States, the Business Cycle Dating Committee of the National Bureau of Economic Research (NBER) is generally seen as the authority for dating U.S. recessions. The NBER defines an economic recession as: "a significant decline in [the] economic activity spread across the country, lasting more than a few months, normally visible in a reduction in real GDP growth, real personal income, employment (non-farm payrolls), industrial production, and wholesale-retail sales[7]." Academics, economists, policy makers, and businesses defer to the determination measurement by the NBER for the precise dating of a recession's onset and end[8.] A depression is a severe economic downturn that results in a decline in real GDP exceeding 10% and is a recession lasting three or more years[9.] Table 1.1 identifies the conditions in the Great Depression of the 1930's and the (2007-2010) economic condition.

Table 1.1
Comparison of the Great Depression (1930s) to the Current (2007-2010) Economic Conditions

Factor	2007-2010	1930's
GDP	Less than 5%	Down 30%
Unemployment	5-10%	25-30%
Consumer prices	Fairly stable	Down 20-30%

During the 1930's depression gross domestic product fell by over 30 %[10]. Since 2007 gross domestic product has fallen by less than 5 %. While in 2007-2010 unemployment hovered about 5-10 %, unemployment during the 1930's depression was approximately 25-30 %. In the 2007-2010 time period, consumer prices have held fairly stable; however, during the Great Depression there was between a 20-30 % reduction in consumer prices. Fortunately, this economic downturn does indeed appear to be a recession as opposed to a depression. However, the U.S. economy experienced its worst economic conditions since the Great Depression[11]. The U.S. Government has played a very significant role (e.g. Chrysler and G.M.) throughout this period of recession.

In essence, the government has been regulating economic conditions (e.g. economic stimulus package). As the government reduces its regulatory role, firms will need to learn how to adjust to the new economic environment. These economic conditions (2007-2010) have had a significant impact upon industries and firms. Let us begin with what caused the current (2007-2009) economic crisis.

U.S. Economic Collapse

What happened was caused by a combination of two factors. The first factor was people losing their jobs causing them not to be able to pay their mortgages. In the U.S., significant job losses have been going on since December 2007 and accelerated in September 2008. In 2008, 2.6 million jobs were lost. From January through April of 2009, 2.6 million jobs were also lost.

The rise of advanced economies in Russia, Brazil, India, and China increased the total global labor pool dramatically. Recent improvements in communication and education in these countries has allowed workers to compete more effectively with workers in traditionally strong economies, such as the United States. This surge in labor supply has provided downward pressure on wages and contributed to unemployment.

The second factor that has contributed to the challenging economic conditions is falling housing prices in the U.S. Historically, the U.S. housing market has been very strong. From the mid-1990 to 2005, housing prices grew. During the same period of time, the U.S. gross domestic product (GDP) per capita was rising.

Housing prices stopped increasing in 2006, started to decrease in 2007, decreased in 2008 and have fallen about 25% from the peak in 2005[9]. During 2007-2010, the decline in prices meant that homeowners had more difficulty refinancing their mortgage rates. This action caused delinquencies and defaults of mortgages to increase sharply, especially among subprime borrowers. Sub-prime loans were made to customers who had spotty credit histories. In 2006, it was estimated that over half of the loans were sub-prime. Banks who had financed these mortgages tried to sell the loans to other banking institutions. In order to sell the loans, these institutions had to lower the price. These actions made the initial bank and the bank who acquired the loans worse off. In general, this is what led to the demise of Bear Stearns and Lehman Brothers. Many other firms were also dramatically affected. From Table 1.2, the top U.S. bankruptcy filings of all times included six firms in the United States.

Table 1.2 Top 10 U.S. Bankruptcy Filings of all Time		
Company	**Bankruptcy Date**	**Assets ($ billions)**
1. **Lehman Brothers**	6/15/2009	691
2. **Washington Mutual**	9/26/2008	328
3. Worldcom Inc.	7/21/2002	104
4. **General Motors**	6/1/2009	91
5. Enron	12/2/2001	66
6. Conseco Inc.	12/17/2002	61
7. **Chrysler**	4/30/2009	39
8. **Thornburg Mortgage**	5/1/2009	36
9. **Pacific Gas and Electric**	4/6/2009	35
10. Texaco Inc.	4/12/1987	34

Although the economic crisis started in the home mortgage market, it spread to commercial real estate, corporate junk bonds, and other forms of debt. Total losses to U.S. banks reached as high as one-third of the total bank capital. The crisis has led to a sharp reduction in bank lending, which in turn caused a severe recession in the U.S. economy[10]. How mortgages were affected needs to be discussed.

Borrowers were given low mortgage rates from banks for the first two to three years (these initial low rates were called "teaser rates") [12]. The strategy was that by the time the teaser rates expired and the rates were to be adjusted upward, the value of their homes would have increased enough so that a new mortgage could be taken out and the old mortgage paid off. However, this strategy worked only as long as housing prices were increasing.

When housing prices stopped increasing in 2006, this strategy no longer worked[13]. Old mortgages could no longer be refinanced, so the borrowers were stuck with higher mortgage rates that they could not afford, and the default rates started to increase. From the first quarter of 2006 to the third quarter of 2008, the percentage of mortgages in foreclosure more than doubled from 4.5 % to 10 %[14]. This foreclosure rate was the highest since the Great Depression.

According to data from Bankruptcy Data.com, a division of New Generation Research, Inc., bankruptcy filings among publicly traded companies surged 74 % in 2008[15]. There were 136 bank bankruptcy filings in 2008, compared with 78 in 2007. While the year-over-year growth in bankruptcies rose quickly, the value of the firms seeking protection grew much faster. The 136 banks seeking bankruptcy protection in 2008 had about $1.16 trillion in assets, compared with just $70.5 billion in assets for banks filing for bankruptcy protection in 2007[16].

U.S. Government Stimulus Plan

The U. S. government tried to stabilize this economic crisis. President Obama's economic stimulus package, $787 billion, has been an attempt to get the economy back on track. On February 10, 2009, the Senate voted 61-37 to approve President Obama's economic stimulus bill. The first piece of the plan would create one or more banks that would rely on taxpayer and private money to purchase and hold the banks' bad assets[17]. In the credit markets, the administration and the Fed are proposing to expand a lending program that would spend as much as $1 trillion to make up for the $1.2 trillion decline created between 2006 and 2009 by issuing securities backed primarily by consumer loans[18].

The second major component of the plan gave banks capital with which to lend. Banks that receive new government assistance cut the salaries and perks of their executives and sharply limited dividends and some corporate acquisitions[19].

The third piece of the plan uses the last $350 billion that the Treasury has allocated for the bailout to rely on the Federal Reserve's ability to create money. The Fed's money enabled the government to become involved in the management of markets and banks[20].

By comparing the first six months of 2006 with the first six months of 2009, results were not promising. Retail sales have decreased from $360 billion in 2006 to $340 billion in 2009[21]. Construction of new homes has declined from approximately 2 million in 2006 to less than 500,000 in 2009[22]. The purchasing managers' index shows the manufacturing sector activity has declined significantly since 2006. Orders for nondefense capital goods decreased from over $60 billion in 2006 to less than $50 billion in 2009[23]. Jobless claims increased from 300,000 to over 600,000. In 2009, the number of people who are receiving jobless benefits rose to 670,000 million individuals. This is the highest total since 1967[24]. The impact of the recession upon the U.S. auto industry has been especially severe.

U.S. Auto Industry

G.M. and Chrysler received billions of dollars in government funds to try to return to profitability. As of mid-2009, nothing positive had happened. Chrysler emerged from Chapter 11 bankruptcy (7th largest filing of all time: Table 1) and G.M. has received several billion dollars in additional government aid. G.M. was in a particularly difficult position. On March 30, 2009, Rick Wagoner, the CEO of G.M. was forced to resign. This was one of the first times that a U.S. government has forced out a CEO of a publically held company[25]. This would appear to have been a necessary move.

G.M. has not turned a profit since 2004. Between 2004-2008, G.M. has lost 82 billion dollars. G.M.'s stock was trading at $70/share in June 2000. On March 30, 2009 the stock was trading at $3.62. In May 2009, the stock was trading at $0.75[26].

Because of these conditions, G.M. has had to borrow money from the government. As part of President Obama's bailout plan, G.M. borrowed $15.4 billion[27]. In addition, G.M. was forced to borrow an additional $4 billion during the first quarter of 2009 to stay in business[28]. In addition, G.M. eliminated its Pontiac division and cut 21,000 employees[29]. On May 16, 2009, G.M. began to close 1100 of its dealerships[30]. On June 1, 2009, GM went into Chapter 11 bankruptcy protection (4th largest filing of all time: Table 1.2). Several other businesses of G.M. were affected. The Saturn brand was discontinued in 2009. In 2010, the Hummer brand was discontinued.

G.M. has exited Chapter 11 Bankruptcy Protection and has been increasing revenues, earnings and earnings per share from 2010.

Chrysler has taken a somewhat different approach. Chrysler has obtained $9 billion in bailout funds and exited Chapter 11 bankruptcy protection after 45 days on June 12, 2009. Chrysler has looked to Fiat for assistance. The U.S. Government has put in place goals for Fiat if it desires to increase its ownership of Chrysler. Fiat will be allowed to expand its ownership of Chrysler up to a majority stake if the Italian auto maker meets certain goals[31].

Table 1.3 shows a comparison of U.S. auto sales from November 2013 to November 2014. Chrysler has had the second highest growth rate (20.1%) of any auto firm producing cars in the U.S. The table shows that the majority of U.S. auto sales is made up of four firms: (1) GM (2) Ford (3) Toyota and (4) Chrysler. The big 3 U.S. auto manufactures may have returned to a position of strength within the U.S.

Table 1.3
U.S. Auto Indicates
November 2013 to 2014

Company	**Sales**	**Growth**	**Share**
1. **GM**	225,818	6.5%	17.3%
2. **Ford**	186,334	-1.8%	14.3%
3. **Toyota**	183,346	3.0%	14.1%
4. **Chrysler**	170,839	20.1%	13.1%
5. **Honda**	121,814	4.6%	9.4%
6. **Nissan**	103,188	-3.1%	7.9%
7. **Hyundai**	53,672	-4.2%	4.1%
8. **VW**	48,801	9.0%	3.7%
9. **Subaru**	45,273	23.6%	3.5%
10. **Kia**	44,936	-1.0%	3.5%

International Recession

This recession (2007-2010) has not been experienced solely in the U.S.; it has had negative impacts in several international markets. During 2006 and 2007 global investors with significant amounts of cash were looking for ways to invest their funds. As discussed earlier, Wall Street investment firms began to consolidate investments with both prime and sub-prime loans. As housing prices declined many large and well established investment and commercial banks in Europe suffered huge losses. This recession has resulted in a sharp drop in international trade, rising unemployment and a reduction in commodity prices. This impacted not only the U.S. investors but international investors as well.

Wall Street hedge funds held by large institutional investors and foreign banks who had bought some of the consolidated loans had difficulty selling the loans[32]. Banks stopped lending in an effort to conserve cash. The worldwide recession became worse because investors who had funds were not investing. This action caused stock markets worldwide to plummet. As stock prices fell, firms cut expenses to try to keep up with the declining stock prices. This caused a significant increase in unemployment and individuals stopped making purchases except for necessities.

The collapse of the housing market in the U.S. had a direct impact not only on the nation's mortgage banks but also upon U.S. and international home builders, real estate, and home supply retail outlets. The continuing development of this crisis led to a global economic collapse[33]. Beginning with failures caused by misapplication of risk controls for bad debts, collateralization of debt insurance and fraud, large financial institutions in The United States and Europe faced a credit crisis and a slowdown in economic activity. The crisis rapidly developed and spread into a global economic shock. This resulted in a number of European bank failures, declines in various stock indexes, and large reductions in the market value of equities and commodities.

Other impacts were felt in international markets. In 2009, currency values, oil prices and other commodity prices increased significantly while housing prices in the European Union continued to decline. Steep declines in the economies of three of the U.S.'s biggest trading partners – Mexico, Japan and Germany – underscored the severity of the global recession and put pressure on major industrialized nations to revive global trade talks[34]. Mexico has been affected significantly.

Mexico's gross domestic product fell at an annualized rate of 21.5% in the first quarter of 2009. This was the worst performance since the 1995 peso crisis which led to an International Monetary Fund and U.S. Treasury financial rescue. Mexico, during the past 15 years, has depended on demand for goods from the U.S. to stabilize its economy. About a fifth of Mexico's economy depends on manufacturing exports to the U.S., and this dramatic drop in demand has hit Mexico hard[35]. During the first quarter of 2009, Mexican auto production slid 41% compared to the same period the year before. Mexico's decline was followed by Japan's as its economy contracted in the first quarter of 2009 by 15.2%, its worst performance since 1955[36]. Germany's first quarter of 2009 showed a decline in GDP by 14.5%, which was the worst since 1970. All of these countries depend heavily on exports to the U.S. This no longer happened because U.S. consumers have cut back purchases from these countries.

Many industrialized countries went into recession in 2008. The following countries went into recession in the third quarter of 2008: Japan, Sweden, Hong Kong, Singapore, Italy, Turkey and Germany[37]. In addition, the fifteen nations in the European Union that use the euro went into recession in the third quarter of 2008. The following countries went into recession in the fourth quarter of 2008: United Kingdom, Spain, Taiwan, Estonia, Latvia, Ireland, New Zealand, Russia, Netherlands, and Iceland[38]. It is possible that some of these countries may have obtained funds from the U.S. Federal Reserve.

I would like to thank one of our professors, David Baker, for bringing the following recent events to my attention.

THE "SECRET" GLOBAL BAILOUT

In October of 2011, the government accountability office (GAO) conducted an audit of the Federal Reserve. Ben Bernanke, chairman of the Federal Reserve vigorously objected to this audit. He had good reason for his objection. The results of the audit were shocking. During the period of the recession (2007-2010), the Federal Reserve "loaned" $16 trillion (000,000,000,000) in funds to U.S. banks, international banks, and international firms[39]. These funds were loaned at zero percent interest. The Federal Reserve had not informed the U.S. Congress about this "global bailout."[40] It does not seem reasonable that the U.S. Federal Reserve should be loaning this level of funds to international banks and international firms during a recession within the U.S. The list of institutions that received the most money from the Federal Reserve can be found on page 131 of the GAO Audit. A brief summary of firms is shown in Table 1.4.

TABLE 1.4 **Institutions Bailed Out by the Federal Reserve**
Citigroup: $2.5 trillion Morgan Stanley: $2.04 trillion Merrill Lynch: $1.949 trillion
Bank of America: $1.344 trillion
Barclays PLC (United Kingdom): $868 billion Bear Sterns: $853 billion
Goldman Sachs: $814 billion
Royal Bank of Scotland (UK): $541 billion JP Morgan Chase: $391 billion
Deutsche Bank (Germany): $354 billion UBS (Switzerland): $287 billion
Credit Suisse (Switzerland): $262 billion Lehman Brothers: $183 billion

The Economic Recovery

Many economists believe that the global recession ended in 2010. Paul Dales, senior U.S. economist believes that "the economy is unlikely to grow at a decent rate anytime in the next year or two." Consumer spending drives about 70 percent of the economy. The good news is that oil prices reduced significantly in 2015 increasing consumer spending. A political impasse over general budget cuts, combined with Europe's debt crisis, have still created uncertainty in international markets.

While unemployment rates have declined in 2015, workers are seeing limited, if any, pay increases because they lack leverage in a market where jobs are still hard to find. This limits businesses ability to raise prices, even though many companies are facing higher costs.

The global economy is expected to grow in 2015 as reported by the Organization for Economic Co-operation and Development (OECD). This organization's mission is to improve the economic and social well-being of people around the world. The member nations of OECD are Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the U.S. OECD economist expect that economic recovery will take place at different speeds for different counties.

The top challenge facing these countries is widespread unemployment, which has affected more than 50 million people of OECD nations. Governments must ensure that employment levels match the unemployed to jobs. They should consider reducing taxes on labor via targeted subsidies for low paid jobs; and promote work-sharing arrangements that can minimize employment losses during economic downturns.

Table 1.5 shows selected growth rates from 2013 to 2014 for Dow Jones firms. From Table 1.5 we can see that many firms in the Dow Jones industrial average had solid growth rates from 2013 to 2014[41].

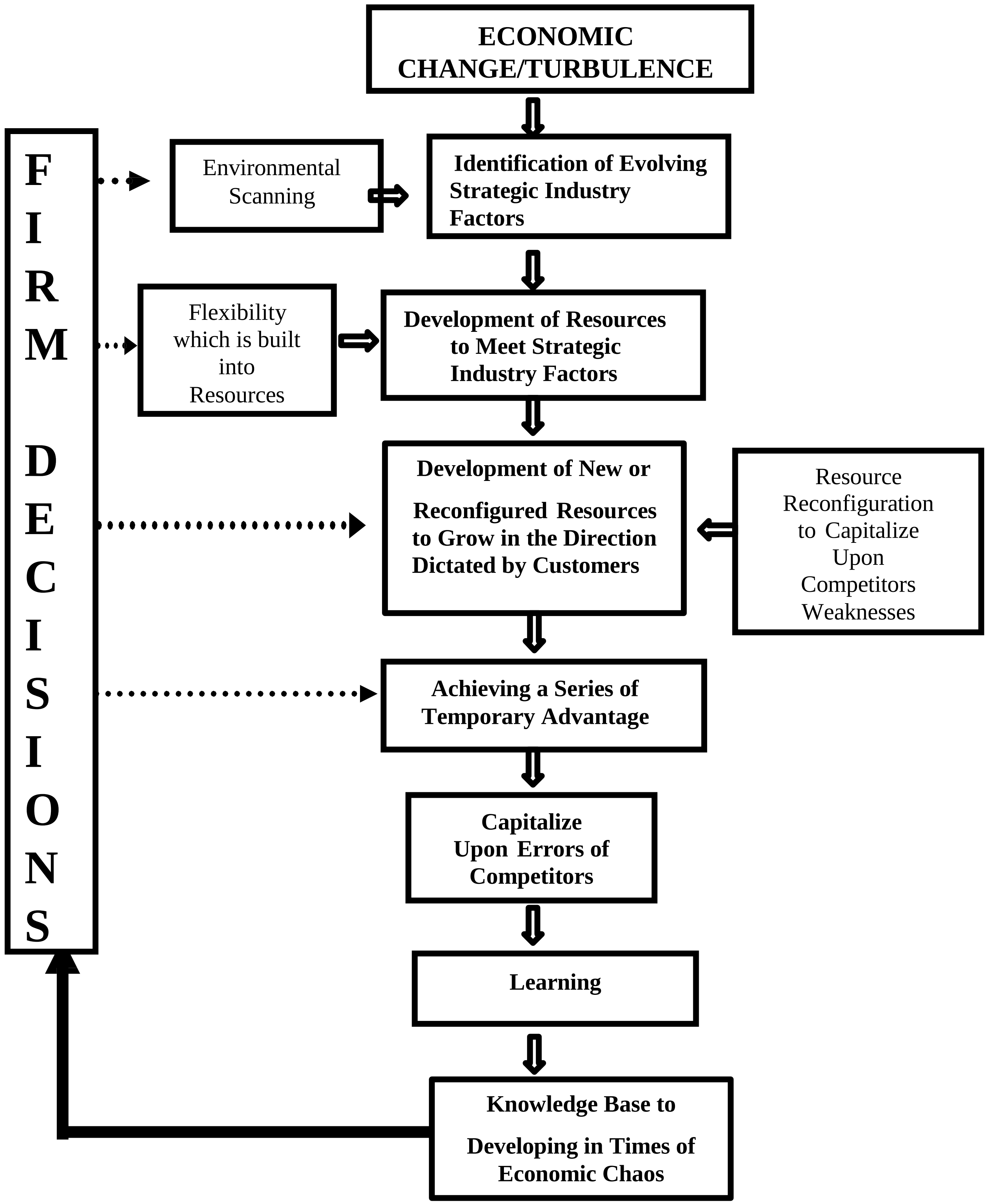
Table 1.5
Growth of Dow Jones Stocks (2013-2014)

Company (ticker)	Growth Rate
Chevron (CVX)	13.1%
Pfizer (PFE)	12.6%
Boeing (BA)	11.8%
JP Morgan (JPM)	9.4%
General Electric (GE)	9.1%
United Tech. (UTX)	9.0%
Walt Disney (DIS)	7.4%
American Express (AXP)	7.2%
Verizon (VZ)	7.0%
Merck (MRK)	6.3%
Home Depot (HD)	6.0%
Exxon Mobil (XOM)	6.0%
Int'l Bus. Mach. (IBM)	5.7%

The Dow Jones stock market may be able to break 18,000 in 2015. Applying the Dow multiplier to analysts' published 18-month price targets for the 30 stocks in the Dow reveals that 18,000 is a record about to be broken[42]. If analysts' targets are right – the Dow is on pace to hit 18,345 in 18 months or less. That would be a modest 3.0% increase from current levels. But, the market is already at record levels with the Dow up 7.4% in 2014 and 172% since the bull economic market began[43].

While we may be beyond the global economy recession, turbulent times will come again. Changing economic conditions can occur at any time. In order to stay ahead of changing and/or turbulent environments, Figure 1.1 provides a guide to growing during changing times.

Figure 1.1: Growth Within Changing or Turbulent Environments



First, firms must develop the capability to scan the changing environment to identify how a specific industry is changing and why it is changing in this direction. For several years, Caterpillar has been experiencing record profits and record growth. However, its most profitable division, mining equipment, cannot achieve profitability under current economic conditions (2009-2010). Its mining trucks are used to extract oil from sand. If the price of oil is greater than $40/barrel, these mining processes are profitable. If the price is below $40/barrel, the processes are not profitable. Knowing this fact, Caterpillar is developing mining equipment which could be profitably used at prices less than $40/barrel. During 2010, the global mining industry became very profitable throughout the world. Caterpillar had an 18 month back log on its mining trucks. In 2010 and 2011, Caterpillar generated records in terms of revenues and profits. This is no longer the case. With the price of oil being significantly reduced in 2015, Caterpillar must find alternative uses for this equipment.

Second, during times of economic turbulence, firms must be able to analyze industries to determine strategic industry factors[44]. Strategic industry factors are factors which dictate consumer buying decisions. What the firm needs to do is to identify the current customer needs while developing the capacity to identify emerging customer needs. Cell phone manufacturers have sequentially added features as the industry has evolved to require additional technology capabilities.

Third, a firm needs resources that can be developed to address current strategic industry factors. In an effort to reduce costs, many universities have developed distance learning or online courses. This approach is also beneficial to students because they do not need to incur additional expenses, such as gas or time commuting to a centralized location.

Fourth, in an economic crisis, firms need to develop resources which have flexibility. Resource flexibility is crucial for growth[45]. In many cases, the direction a firm will grow is not known before the fact. For example, Toyota has been successful because its production processes are designed to support different models of cars with minimal modification.

Fifth, during times of turbulence a firm's resources need to be combined and reconfigured to meet the needs of significant environmental change[46]. As this happens firms develop new resources which have the capability to create new and/or improved products. As the price of oil continues to climb, global auto manufacturers have responded by developing alternative forms of fuel which are not dependent upon oil. The significant point with respect to the creation of new resources is that they make existing and/or related resources better from a differentiation perspective. The new resources should be put to their most productive use by developing capabilities which add value (e.g. process and product R & D). The firms that experience the highest growth rates are able to develop a sequence of temporary advantages that are linked over time to provide long-term growth. The pharmaceutical industry is an example of an industry which requires firms to continuously develop new products to replace existing products which are coming off patent protection (e.g. Lipitor).

Fundamentally a firm must grow with its customer base over time. It is of critical importance that the firm stays close to the customer to ascertain how strategic industry factors change over time. This is becoming increasingly difficult as email and fax become routine modes of communication. To fully understand the evolutionary needs of its customer base, the firm must keep in close, personal contact with them. If they do not its competitors may develop goods and services which meet customers' needs and take significant revenues from the initial firm. This is what happened to the U.S. auto industry as European and Asian auto manufacturers entered and established strong positions within the U.S. several decades ago. These international firms improved these positions over time by continuously developing new automobiles which addressed current consumer needs.

Sixth, take advantage of the strategic errors of competitors. The crux of strategy is to gain a position of advantage and then sustain that position over time[47]. Established business models may not work.

The deregulation of the trucking industry was one case. During the initial phase of the deregulation of the U.S. trucking industry, trucking firms attempted to move into related industries before they had fully developed their operational infrastructure; all these firms went out of business. From a trucking prospective, if a firm's infrastructure is not fully developed, it is difficult to meet the needs of a customer base which is expanding geographically. In this industry a fully developed infrastructure is a prerequisite for growth. In the trucking industry, those firms which established this complete infrastructure grew after the industry was deregulated. Those firms which did not went out of business.

The fast food industry provides another example of firms taking share from competitors. Some customers now prefer fast food restaurants to provide meals which are low in calories and fat. McDonalds has recognized this need and has developed several options for its customers seeking healthy options. Hardees' is a fast food restaurant which has not.

As these firms continue to grow learning becomes important. Learning from other firms can be an important factor. The airfreight firms learned from the telephone companies the benefits of a hub and spoke network. They learned that they could significantly reduce transit time and overall costs by developing an integrated air-ground, hub-and-spoke operating system. By developing global hub-and-spoke operating systems, carriers provide shippers with total global coverage. This learning provides a knowledge base for firms to make better strategic decisions during periods of significant economic change.

The role of alliances is becoming increasingly important in the twenty-first century. Many firms that have grown in volatile environments have developed strategic alliance networks that provide for global coverage. The Star, One World, and SkyTeam alliances have provided airlines throughout the world with global coverage. These alliances permit access to market positions without significant incremental costs being incurred. Airlines who are members of these international alliances obtain a global coverage advantage over carriers that have not engaged in international airline alliances. As firms begin to grow within domestic environments, alliances provide firms with the capability to grow over time in changing environments within international markets. As they move into international markets, as a result of these alliances, firms continue to learn how to grow in different types of international environments. This new knowledge base allows firms to grow based upon what has been learned. The lessons learned in the 2007-2010 recession provide valuable insights for future recessions and, more importantly, how to prevent entering future recessions.

Discussion Questions

1. Explain how the current economic recession differs from the depression in the 1930's.

2. Why has the U.S. Government taken a significant ($787 billion) role in the current economic recession?

3. What led to the collapse of the economic environment within the U.S.? Answer the same question from an international perspective.

4. What can we learn from Table 1.2?

5. Why has Mexico encountered such a significant collapse from an economic perspective?

6. For a firm of your choice, explain how this firm can grow within turbulent environments using Figure 1.

7. What is one of the single most important factors to judge whether a country is recovering from the global economic recession?

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L'Oréal Mini Case

L'Oréal is one of the largest luxury cosmetic firms in the world. L'Oréal has 4 distinct product lines: (1) consumer products, (2) professional products, (3) luxury products, and (4) active cosmetics. Distribution of revenues by segment is identified in Table 1.

Consumer products are L'Oréal's largest business segment. It accounts for €11.19 billion of total revenues. L'Oréal defines consumer products as "the best in cosmetic innovation at accessible prices in mass-market retail channels."

Luxury products are L'Oréal's 2nd largest business segment. This segment focuses mainly on three business segments: skincare, make-up, and fragrances. This segment accounts for €6.44 billion of total sales.

Professional products are L'Oréal's 3rd largest business segment. This segment "distributes its products in hair salons all over the world." This segment accounts for €3.15 billion of total sales.

Active cosmetics are L'Oréal's 4th largest business segment. This segment addresses "all consumers' health and skincare needs." These products are sold through pharmacies, drugstores, spas, and dermatologists. The segment accounts for €1.73 billion of total sales.

Table 1
Distribution of Revenue by Segment (2014) (€ Millions)

Business Segment	Revenues (€ billions)	Segment Revenues of a Percent Total
Consumer Products	11.19	49.7
Luxury Products	6.44	28.6
Professional Products	3.15	14.0
Active Cosmetics	1.73	7.7
Total	23.01	100

Table 2 shows L'Oréal's revenues by geographic market (2014).

Table 2
Revenues by Geographic Market (€ Billions)

Market	Revenues (€ billions)	Percent of Total
Western Europe	11.53	50.1
North America	2.39	10.4
New Markets	9.11	39.6
Total	23.01	100

Table 3 identifies L’Oréal’s distribution of operating profit by geographic region.

Table 3 Breakdown by Operating Profit (2014)		
Market	**Profit (€ Billions)**	**Percent of Total**
Western Europe	8.17	40.5
North America	5.73	27.9
New Markets*	4.86	23.3
Rest of World	4.25	8.3
Total	23.01	100

*Fully developed markets outside Western Europe and North America

Discussion Question:

1. Where (what countries) should L’Oréal expand?

Chapter 2

Industry Analysis and Industry Evolution for the 21st Century

Learning and Assessment Goals

1. Understand the challenges of the 21st century.

2. Obtain the ability to conduct an industry analysis.

3. Determine at what stage firms are in from an industry evolution perspective.

4. Understand the relationship between industry analysis and industry evolution.

5. Understand how Porter's (1980) 5 forces model changes as a firm moves from one stage of industry evolution to the next.

Decades ago (1960), Levitt made the following statement:*

"The railroads did not stop growing because the need for passenger and freight transportation declined. That grew. The railroads are in trouble today (1960) not because the need was filled by others (cars, trucks, airplanes, even telephones), but because it was not filled by the railroads themselves. They let others take customers away from them because they assumed themselves to be in the railroad business rather than in the transportation business. The reason they defined their industry wrong was because they were railroad-oriented instead of transportation-oriented; they were product oriented instead of customer-oriented."

Levitt's principle argument was that firms classified their industries as much too narrow. The railroad industry firms were viewed as only serving railroad customers. The railroad firms are now making profits because they are focusing upon customers in the transportation industry. These firms are now multi-modal firms which serve customers in trucking, ocean shipping, airline, and air freight in addition to their core group of railroad customers. I believe that Levitt would be proud of the railroad carriers of today.

*Source: Theodore Levitt 1960 Harvard Business Review

The Competitive Environment in the 21st Century

Firms need to have a very clear objective. This objective is referred to as the mission statement. All stakeholders of the organization should understand the mission statement. For example, Southwest Airlines mission statement is "dedicated to the highest quality of customer service delivered with a sense of warmth, friendliness, individual pride, and company spirit." In an era of cost-oriented airlines, Southwest wishes to become the airline that provides its customers the highest quality of airline transportation service. This mission may be one reason Southwest Airlines is the only airline that has been profitable every year since the airline industry was deregulated in 1978.

While the mission statement is what the firm wishes to become, the statement of strategic intent is how a firm is to accomplish its mission. Strategic intent identifies how the firm uses its resources to achieve advantage within a competitive environment. The competitive environment of the 21st century differs significantly from the competitive environment of the 1990's.

Some believe that the 21st century will bring significant change. Gary Hamel (co-author of *The Future of Management*) believes that strategic leaders will need to greatly change how they manage. The 20th century model of designing and managing companies, which emphasized hierarchy and the importance of labor and capital inputs, is no longer applicable[1]. Forward-looking executives will respond to this challenge by developing new ways to bring innovative products and services to the marketplace[2]. New approaches to managing employees and organizing talent to maximize wealth creation may provide companies with a competitive advantage. As companies change the direction of the firm, they will have to balance revolutionary thinking with practical experience[3].

Scholars believe that the management of technology will be crucial for success within the first few decades of this century. There are three reasons why technology will be important in the current and future environment[4]. As Lowell (author of *Mobilizing Minds*) says, first is the impact of new technology. Technology provides the availability of powerful new tools for coordinating human effort. Second, increasing global demand for goods and services will require companies to be adaptable and innovative[5]. Third, technology can be used to identify unmet consumer needs much more quickly than in the past (e.g., iPhone)[6].

Lowell believes that strategic leadership must include innovation. The scarce resources in any company today are discretionary spending, talent, and knowledge. The issue isn't just innovation, but being able to implement the innovation throughout the company. Bryan believes that the ideas on how to run firms in the 21st century have now reached a stage of maturity which will require managers to consciously innovate.

Bryan believes that we may be entering an area of new technology innovation which will cause managers to adapt to new environments. This will lead to a continued importance of developing innovative as a result of increases in intellectual capital. If innovation can be realized, firms will participate in the new products environment. Otherwise, these other firms will not.

A firm's competitive environment will consist of firms within its industry and may consist of firms in other industries. As such, it is important to identify industry boundaries.

Industry Structure

From an industry analysis perspective, the structure of an industry can take many forms which impact competition in different ways. Table 2.1 shows a number of structures an industry may take.

Table 2.1
Selected Industry Structures

Type of Structure	Number of Competitors	Ease of Entry into Market	Product
Monopoly	One	Many barriers	Almost no substitutes
Oligopoly	Few	Some barriers	Homogeneous or differentiated (with real or perceived differences)
Monopolistic competition	Many	Few barriers	Product differentiation, with many substitutes
Pure competition	Unlimited	No barriers	Homogeneous products

Monopoly A competitive structure in which an organization offers a product that has no close substitutes, making that organization the sole source of supply. The United States Postal Service (USPS) is the only entity that can deliver first class mail.

Oligopoly A competitive structure in which a few sellers control substantial market shares. The worldwide steel industry would be an example of an industry which would be an oligopoly. Three firms dominate the industry: ArcelorMittal, Nippon (Japan), and Posco (South Korea).

Monopolistic competition A competitive structure in which a firm has many potential competitors and tries to develop a marketing strategy to differentiate its product. A good example of monopolistic competition would be the auto industry. The number of global auto manufacturers is quite large.

Pure competition A market structure characterized by an extremely large number of sellers, none strong enough to significantly influence price or supply. Bottled water firms would be an example of pure competition. No one firm can influence price or supply.

Industry Classification

The U.S. government has developed a classification system to group firms into industries. This system, the Standard Industrial Classification (SIC) System, groups firms that produce similar goods and/or services. This system is being replaced by the North American Industry Classification System (NAICS).

The newer system is a result of the North American Free Trade Agreement (NAFTA) that reduced trade barriers between the United States, Canada, and Mexico. This system classifies firms in the U.S., Canada, and Mexico into industries. The NAICS is based upon the International Standard Industrial Classification (ISIC) System, which is used to classify firms into industry groups throughout the world.

Table 2.2
Comparison of SIC and NAICS

SIC code sequence for chewing gum, bubble gum manufacturers

SIC Code	Type of Code	Description
20	Sector	Food and kindred products
206	3 digit sub-sector	Sugar and confectionary product manufacturing
2067	4 digit sub-sector	Chewing gum, bubble gum, and chewing gum base

NAICS code sequence for chewing gum, bubble gum manufacturers

NAICS Code	Type of Code	Description	1997 Value of Product Shipments ($1,000)
311	3 digit sub-sector	Food manufacturing	423,262,220
3113	4 digit sub-sector	Sugar and confectionary product manufacturing	24,301,957
311340	U.S. Industry Code	Non-chocolate confectionary manufacturing	5,080,263
3113404	Product Class	Chewing gum, bubble gum, and chewing gum base	1,310,938

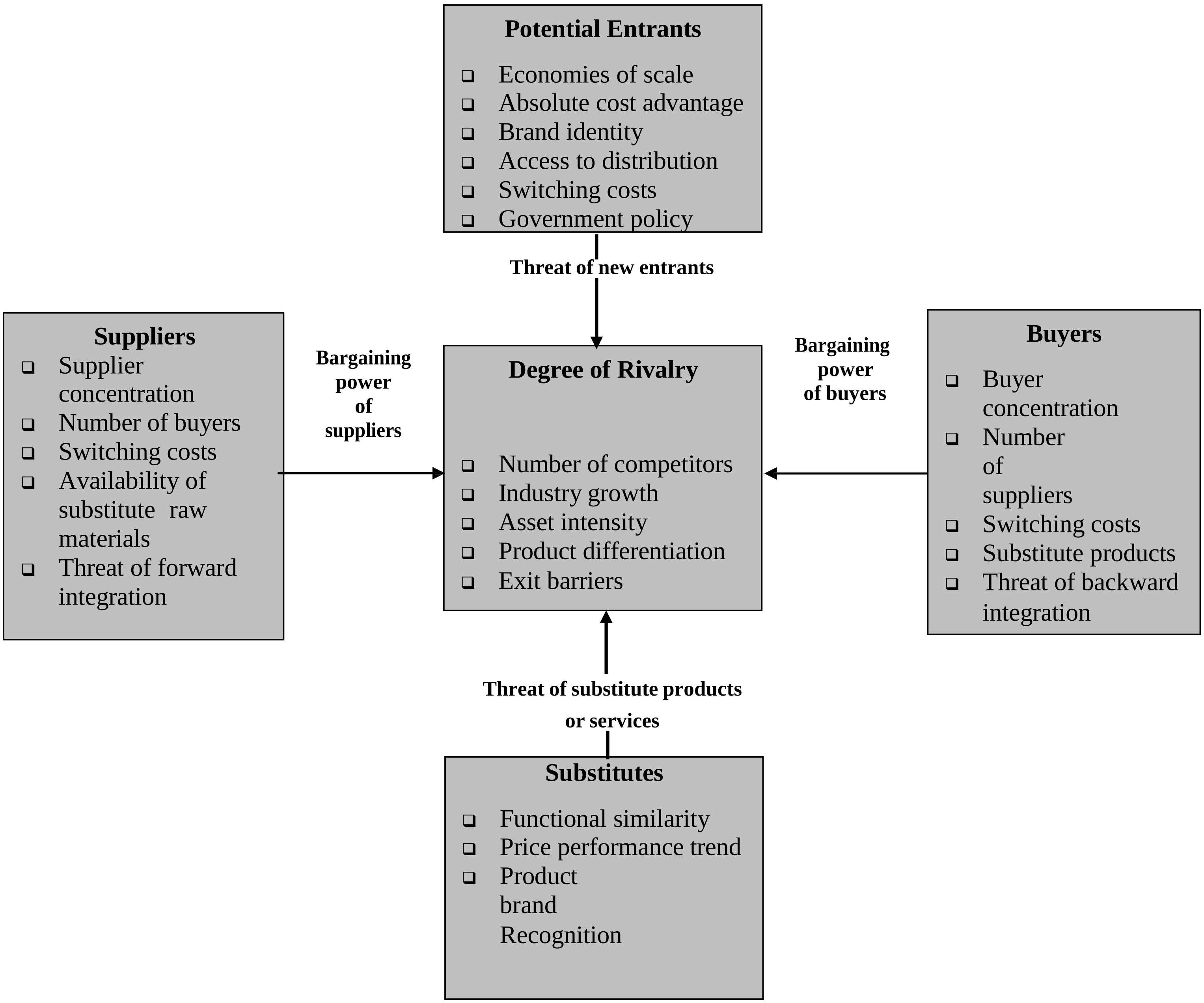
Source: Adapted with the permission of Prentice Hall, from *Strategic management* by Stephen Porth, 108. 2003.

As shown in Table 2.2, the NAICS provides more detailed information than the SIC system. Once industries have been classified, a process needs to be developed to examine the differences between industries.

Porter’s Five Forces

Michael Porter at Harvard University has developed a framework for analyzing industries[7]. His five forces model is illustrated in Figure 2.1.

Figure 2.1
Porter’s Model of Industry Competition



Source: Adapted with the permission of the Free Press from *Competitive advantage: creating and sustaining superior performance* by Michael Porter, 5. 1985

The figure identifies 5 key structural features that determine the degree of competition within an industry. Each element of the figure will now be discussed.

Potential Entrants (Threat of New Entrants)

This force addresses the likelihood that firms, which are currently outside an industry, will enter the industry[8]. If firms within the industry have significant economies of scale, these scale economies act as a deterrent to entry. For example, firms are not likely to enter the ground transportation shipping industry in the U.S. because United Parcel Service (UPS), FedEx, and DHL deliver millions of shipments each day.

Brand name can also deter firms from entering an industry. Coke and Pepsi have such strong brands in the soft drink industry that it would be difficult for new entrants to compete in the beverage industry. Even if entrants attempted to enter a segment (such as bottled water) firms of the industry, they would be likely to face significant competition. For example, Coke has acquired Dasani and Pepsi has acquired Aquafina.

Making sure certain goods and services are available to customers requires establishing an inbound and outbound transportation system. A fully developed distribution infrastructure provides customers easy access to a firm's products/services. Building infrastructure is expensive and time consuming. In addition, new entrants would need to offer a product and/or service that induces the consumer to switch brands. For example, a firm would be unlikely to enter the P.C. industry in the U.S. due to the extensive infrastructure and brand name that Dell has created. The P.C. industry is comprised of large-scale players who primarily compete on price. These industry conditions make it difficult for new entrants to establish a viable position within this industry.

Government policy may also impact a firm's entry into an industry. For example, the United States Postal Service (USPS) is a monopoly with respect to delivery of government mail. As such, competitors are not permitted to enter this segment of the industry.

Bargaining Power of Suppliers

This force addresses the degree to which inputs into the industry affect the relationship between sellers and buyers[9]. If pilots decided not to fly, the airline industry would not function. By having large capital resources (e.g. aircraft) not being utilized, the airlines would be losing even more money than they are currently.

The greater the degree of concentrations of suppliers, the greater the power these suppliers can impact an industry. The OPEC cartel is one reason that gasoline prices are high in 2011. Because final consumers have very few options with respect to travel by car (e.g. train), the suppliers have a significant impact upon the industry. While auto manufacturers are introducing alternative types of cars (e.g. electric), the vast majority of vehicles are still dependent upon oil for fuel.

Bargaining Power of Buyers

This force addresses how much influence customers have within the industry[10]. Where switching costs are low, consumers exert significant power. Switching costs determine how easy it is for consumers to change products/services. Within the auto and brewing industries, consumers have many options; thus, consumers have significant power as to what products/services are manufactured. On the other hand, the pharmaceutical industry has significant control over buyers because drugs are protected by 17 years of patent protection.

Threat of Substitutes

This force addresses how products/services are perceived from the customer's perspective[11]. The more options that the final consumer has, the greater the threat of substitute products. With respect to cell phone manufacturers, consumers have a broad selection. As such, price becomes an elastic variable. Because the functionality is primarily the same, the only option for manufacturers is to compete on price. For industries which do not have brand equity and which have products with similar functionality, price becomes a key variable. Commodity industries such as mining and steel manufacturing tend to be price sensitive markets.

On the other hand, the fashion industry is relatively inelastic with respect to price due to branding (e.g. Gucci). The same brand perception applies to service industries: the Mayo Clinic has one of the best brand reputations for healthcare in the world. To a lesser degree, some management-consulting firms have excellent brand reputations (e.g. McKinsey).

Degree of Rivalry

This issue addresses how much rivalry exists within an industry[12]. The degree of rivalry within an industry is determined by several factors. The first factor is the number of competitors. In general, the greater the number of competitors within an industry, the greater is the rivalry.

When little product differentiation exists, firms compete intensely on price. The U.S. airline and trucking industries are two examples. For industries where significant product differentiation exists (e.g. the apparel industry), competition is less intense and focuses on value (or brand) as opposed to price. For example, brand loyalty in the cosmetics industry is approximately 70 percent[13].

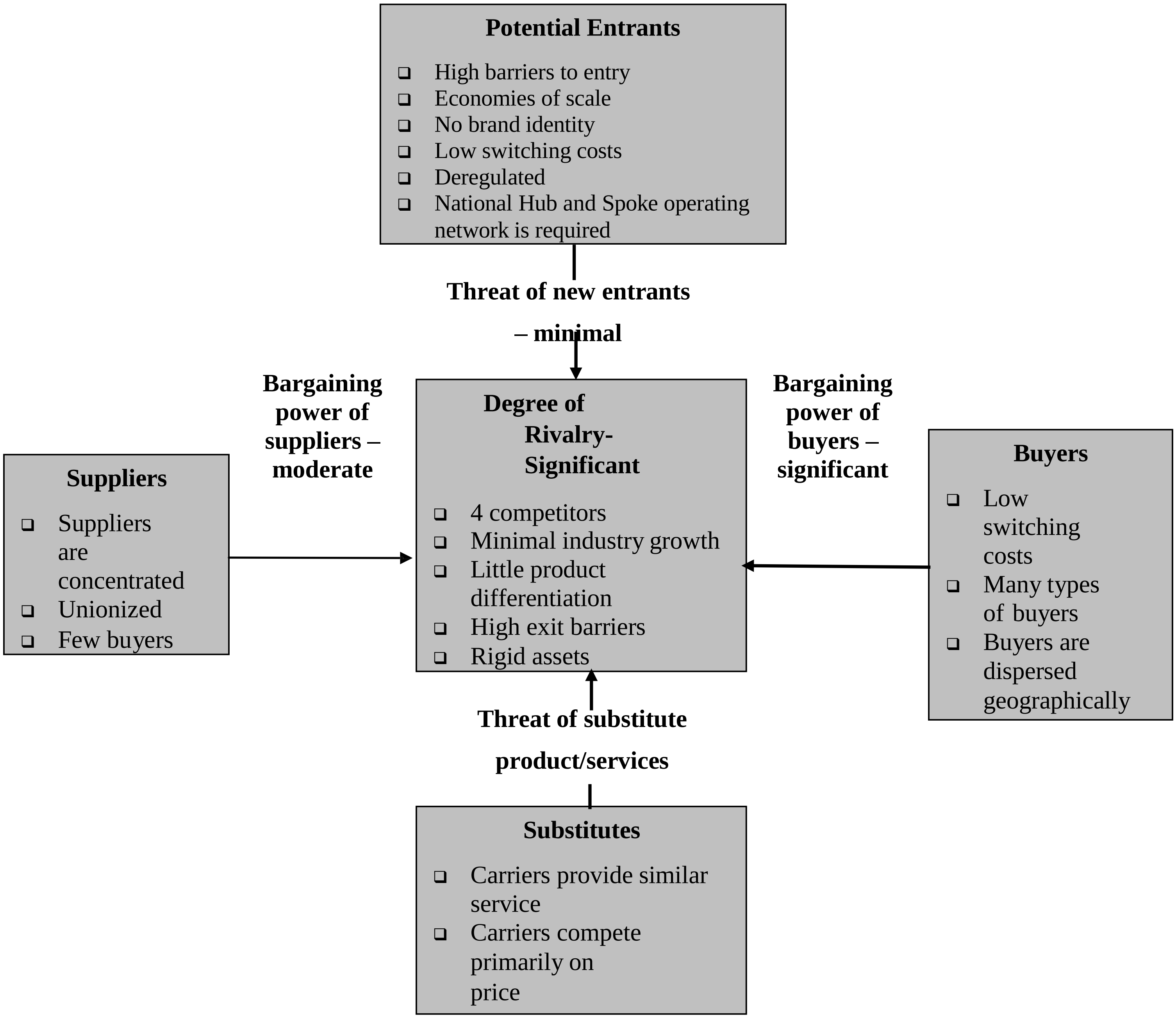
If an industry requires high expenses to acquire and maintain its assets, the rivalry among firms tends to be less. Because of the capital needed to fund R&D, the pharmaceutical industry has only a few large competitors. While these competitors engage in rivalry, the rivalry is focused more on value added products as opposed to pure price.

Figure 2.2 represents a five focus analysis of the LTL (Less Than Truckload) Trucking Industry. This industry involves the movement of shipments above 50 pounds and under 10,000 pounds. The Interstate Commerce Commission (ICC) defines LTL carriers as those motor carriers who transport freight by placing in their trailers multiple shipments from multiple shippers destined for multiple customers. While each individual shipment represents less than a full truckload of freight, the accumulation of multiple shipments results in fully loaded trailers.

This industry is quite homogeneous in its operating structure and market environment, but it is different from the operating structure faced by other segments of the trucking industry. Within this segment, the majority of the carriers utilize a hub-and- spoke operating system that is distinct from the rail, pipeline, and, to a certain extent, the TL (truckload) industry. The threat of new entrants will be discussed first.

Industry Analysis Using Porter's Five Forces Model

Figure 2.2
A Five Forces Analysis of the LTL Trucking Industry (2011)



Before the industry was deregulated in 1980, there were over 100 LTL carriers. As of 2011, 4 major carriers exist. The LTL industry is very capital intensive. As such, this industry has high barriers to entry. Because there is little brand equity, the trucking firms must generate profits as a result of economies of scale. The trucking firm's primary customers are multi-national corporations. These firms do not view one trucking firm as providing a better service than the others. As such, the firms compete on price. Therefore, **the threat of new entrants,** from firms entering from outside the industry is **minimal**. The bargaining power of suppliers will be discussed next.

The workforce of this industry is all unionized. While there is a very large pool of available workers, unionization puts constraints on trucking operations. While there are many suppliers of parts, the manufacturer of trucks and trailers are provided by a small number of firms. As such, these firms exert substantial influence upon the industry. Because of the power of the labor unions and small number of providers of trucks and trailers, the **bargaining power of suppliers is moderate**. The bargaining power of buyers will be discussed next.

Because customers have very low switching costs (firms are substitutable) between firms, the existence of substitutes is significant. Carriers have the accessibility to service all points within the U.S. because they have extension hub and spoke operating networks. Because customers are dispersed throughout the U.S., the trucking firms have an advantage compared to rail and air freight modes of transportation. Still, **buyers have significant bargaining power**. The threat of substitute products will be discussed next.

Because trucking firms provide similar service, these firms must compete aggressively on price for business. This is one reason why costs must be minimized. **Therefore, the threat of substitute products or services is significant**. The degree of rivalry will be discussed next.

The LTL industry is comprised of a small number of large-scale players who compete in an industry with little product differentiation. Because the assets are rigid (trucks, trailers), alternative uses of assets are minimal. The way that many trucking firms have been competing is to form strategic alliances with ocean shipping firms and rail firms. Because all major firms have alliances with railroads and ocean shipping firms, the trucking firms cannot differentiate their services. With substitutes available, trucking firms cannot achieve significant product differentiation. Without product differentiation, cost becomes important. However, the bargaining power of suppliers, especially labor unions, tends to prevent significant cost reductions. With assets that cannot be re-deployed to generate alternative revenue streams, the **degree of rivalry within the industry is significant**.

The 5 forces industry analysis of the LTL trucking industry would lead to the conclusion that this is a difficult industry in which to remain profitable. This is a very mature industry. In 1980, there were over 100 firms. As of 2011, there are 4 major firms. As of 2011 the largest firm in the industry, YRC, is close to entering Chapter 11 bankruptcy protection. This firm has lost over $2.5 billion in the past 5 years. The other three firms in the industry are experiencing minimal (if any) profitability.

Industry Evolution

Porter's 5 forces model provides a perspective for industry analysis at a specific point in time. However, industries evolve over time. Generally, industries move through a life cycle that consists of introduction (embryonic), growth, maturity, and decline stages[14]. Each of these life cycle stages will be discussed.

Introduction Stage

Innovating and creativity dominate the introduction stage. Creativity may be in the form of technology that changes the way we do business. Broad new technologies tend initially to be brought into practice in crude form, representing a bundle of potential resources. The automobile, the airplane, the transistor, the computer, and the laser – were introduced as new technologies that could be utilized in many industries[15]. However, these innovations required considerable refining before they became useful. It took significant investment before these new technologies became major contributors to economic growth[16].

During the introduction stage, products are developed and commercialized for the first time.[17] Advertising plays a key role because potential consumers must be made aware of new products/services created as a result of these innovations. Distribution channels need to be developed to provide infrastructure for the transportation of raw materials into manufacturing facilities and to provide a network to move finished goods to final consumers. Operational processes need to be developed to manufacture products. Financial investments are needed to support high initial investments and initial losses. Because one firm may be supplying the entire market, building a credible image is important.

Growth Stage

As products begin to be accepted within the industry, demand begins to increase significantly. With the increase in demand comes competition. Firms begin to design, manufacture, and distribute similar types of products/services to compete against the initial firm. Channels of distribution are expanded because of the increase in demand. As firms begin to design and manufacture substitutes, the firm that developed the original innovation may develop value added products to remain ahead of competitors. Firms begin to establish long-term relationships with customers to generate repeat purchases. If the incumbent firm has developed a significant market share, prices may be slightly reduced to act as a barrier to entry for competition. New competitors must not only manufacture and distribute the new product/service; they must spend significant R&D to create the new products/services. If potential entrants become aware of the innovating firm adding additional value to its new products, they may choose to enter other industries. During this stage, firms may begin to expand via exporting to international markets.

Maturity Stage

While the introduction phase is dominated by innovation, firms attempt to achieve efficiencies in the maturity stage. With significantly more firms in the industry, firms with the largest market share can obtain efficiencies through higher levels of production or through automation. As scale becomes important, firms may engage in process R&D. Process R&D attempts to achieve efficiencies through Total Quality Management (TQM) initiatives. Investments in capital to achieve large-scale production are important. Products may be viewed as more commodity based: as such, advertising, which attempts to create perceived or real customer benefits, may be more heavily utilized. During the maturity stage, firms may engage in mergers and acquisitions to build larger scale. As a result of mergers and acquisitions, a small number of large-scale players may dominate the industry. International markets are more fully developed through acquisitions, strategic alliances, or foreign direct entry (FDI).

Decline Stage

During the decline stage, demand tends to be significantly reduced as products/services become obsolete. Very little is invested in product or process R&D because firms allocate investments toward more attractive industries. Production is reduced as facilities are utilized to produce products/services for more attractive industries. Customers begin to reduce purchases and buy products/services that address new unmet needs. Investments in marketing and sales are reallocated to products/services that generate higher returns. As price continues to decline, firms that do not have alternative revenue streams begin to have difficulty with profitability. Some firms may enter Chapter 11 bankruptcy or go out of business (e.g. U.S. airline industry). Firms with positions in multiple industries may attempt to sell off their position in the declining industry. Firms will utilize the funds to support investments in more attractive industries. Because of a lack of demand, the profit potential within the industry declines.

Table 2.3
Porter's Five Forces and Industry Evolution
An Analysis of Industry Forces as Firms Move through the Industry Life Cycle

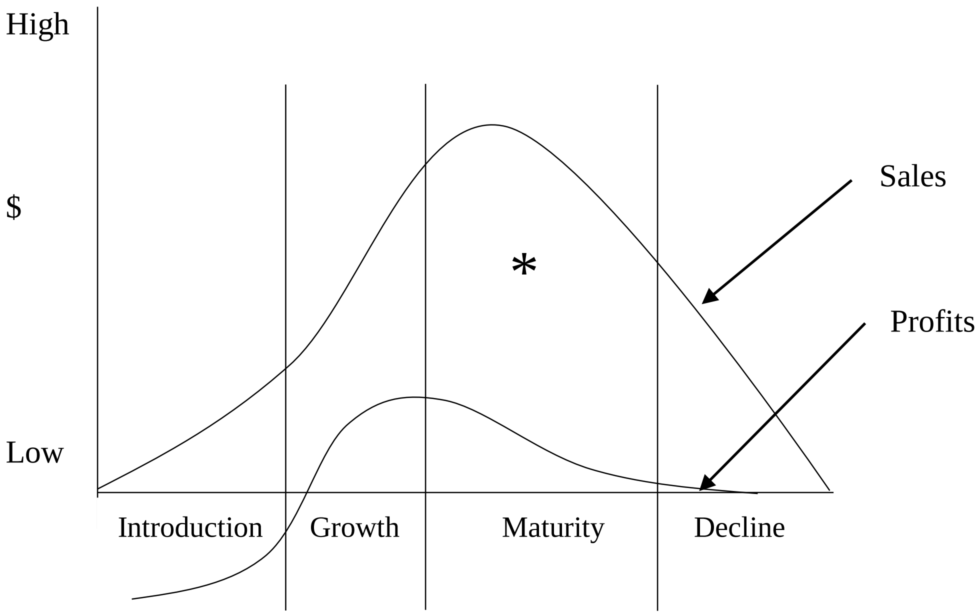
	Introduction	Growth	Maturity	Decline
Bargaining Power of Suppliers	Significant: No prior relationships may exist	Moderate: Distribution channels become larger and more extensive	Moderate: Firms will attempt to lock suppliers into long term contracts to reduce costs	Minimal: Firms use existing channels
Bargaining Power of Buyers	Significant: No revenues without customers	Significant: Customer acceptance is crucial to generate large revenues	Significant: Customers put pressure on manufacturers to reduce price	Significant: Customers purchase other goods/services
Threat of Substitute Products/ Services	None: Substitutes do not exist	Significant: Firms are entering the industry: Initial firms may begin to add additional product/service benefits	Significant: Products/ Services are perceived to be homogeneous. Customers search for lowest priced provider	Minimal: Competitors utilize funds and resources to grow within other industries
Threat of New Entrants	Minimal: Firm with the innovation dominates	Significant: Firms enter the industry with similar products/ Services	Minimal: Price becomes a significant buying factor for customers. Potential entrants look for more attractive industries	Minimal: Firm growth is declining as is firm profitability
Degree of Rivalry	Minimal: One firm dominates the industry	Moderate: Firms enter industry with similar products/ services. Incumbent firms attempt to grow by expanding into new markets or adding value to existing products/ services	Significant: Because price is a key buying factor, firms must expand to generate significant revenues to offset shrinking margins	Minimal: Firms are exiting the industry

As firms move through an industry's life cycle, industry forces change. Table 2.3 provides an overview of Porter's five forces as an industry evolves.

Industry Life Cycle

Figure 2.1

Fully Developed Markets

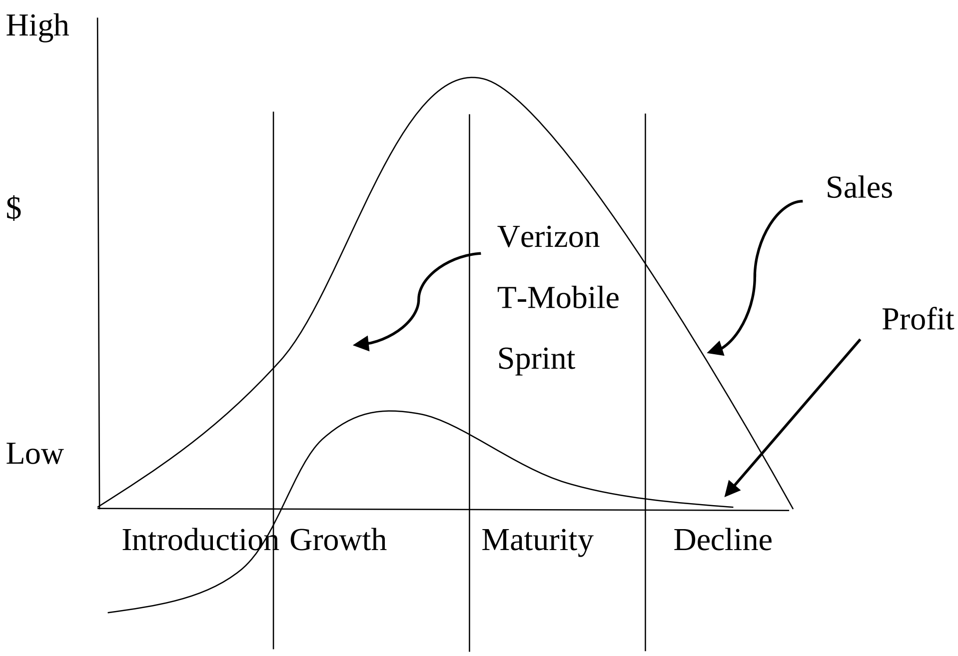


Phase

Figure 2.1 illustrates the industry life cycle. Firms within an industry would be in one of the four phases. In fully developed markets, some industries may be in the maturity stage phase of the life cycle*. In this phase there are a number of firms which are producing relatively standardized products. Let us examine the U.S. cell phone industry.

Figure 2.2

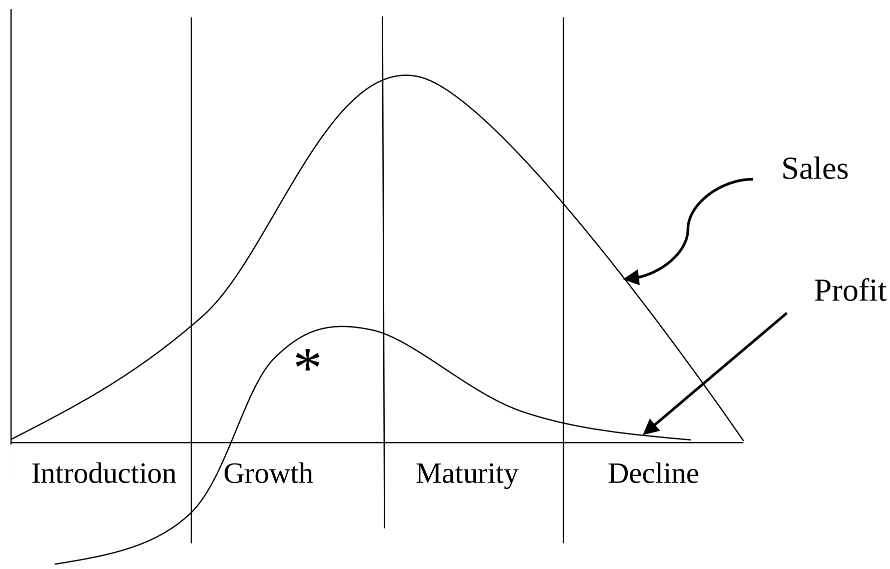
Cell Phone Industry Life Cycle



As can be seen from figure 2.2, there are 3 primary competitors within the U.S. cell phone industry. In 2015, Verizon is advertising the fact that it has greater coverage than the other 3. Verizon believes that this scale advantage is important to customers and would move Verizon* back in the growth stage until the competitors increased their coverage area.

Figure 2.3

Emerging Markets



The life cycle concept also has implications with respect to international market expansion. Refer to Figure 2.3. As countries become more developed there is a need to increase communication capability. Emerging markets will build the infrastructure needed to support country communications. Customers in these emerging markets have needs that basic cell phones provide (communications from one sender to one receiver). This puts cell phones in the growth stage in emerging markets.

Figure 2.4

Less Developed Markets

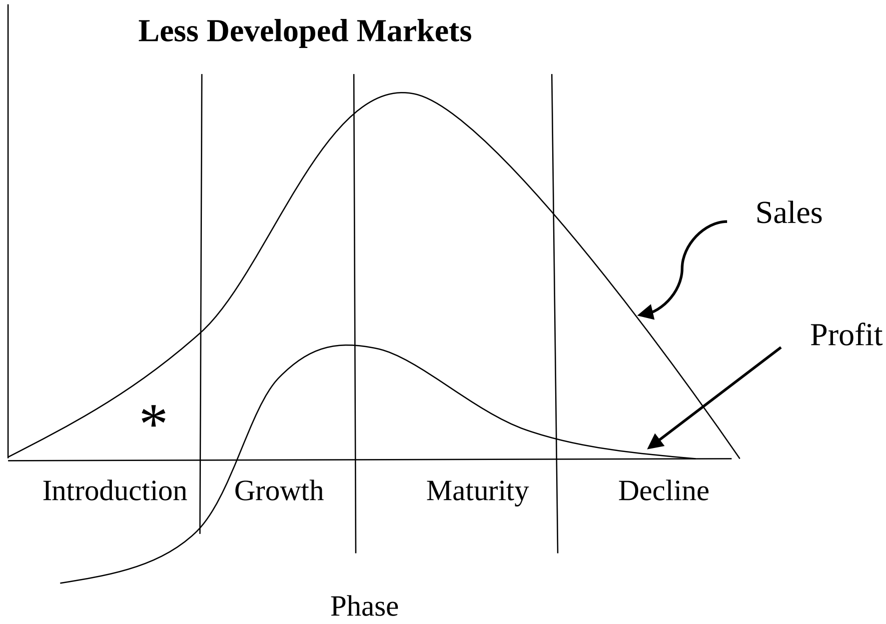
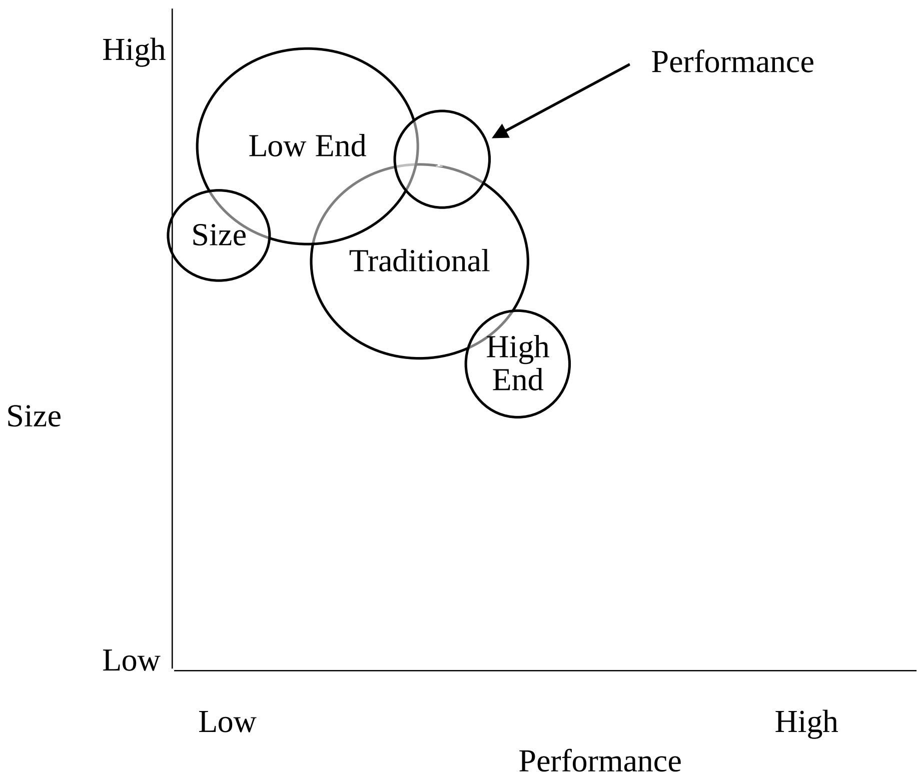


Figure 2.4 examines the less developed markets. In the less developed markets, cell phones would not be widely used because of the low GDP/capita. Only the rich would be able to purchase cell phones. In addition, in less developed markets, the communication infrastructure may not be in place to support cell phone usage.

Let us now view how the simulation industry grows over time. Figure 2.5 shows the initial conditions. First, there are a number of firms who have customers that buy products in multiple segments. As such, firms must be aware that the key buying criteria for each segment has different levels of importance. For example, the firms in the low end segment view price as important. At this point in the industry, customers in the low end prefer products which are large (size) and have lower performance relative to several other segments.

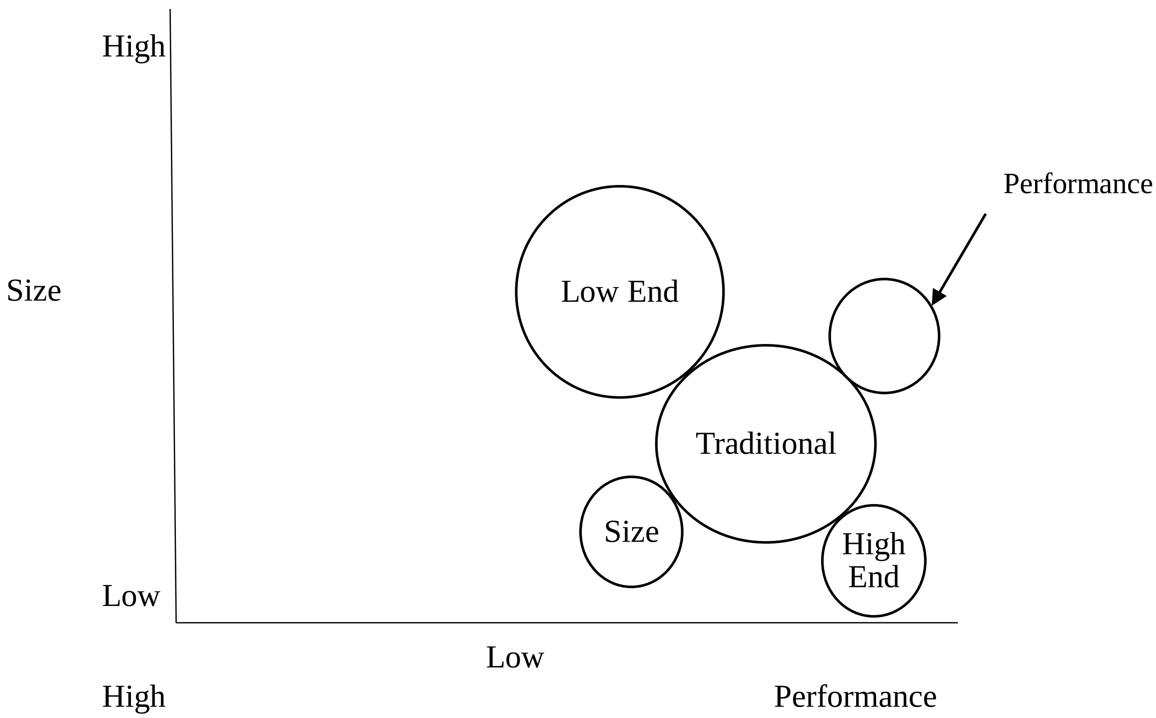
Figure 2.5 *
Year 1



* Size of circle illustrates its market size

Figure 2.6 shows the position of the competitors at the end of round eight. Firms now buy products which are smaller size and have higher performance levels.

Figure 2.6
Year 8



Similar to the railroads, firms could develop products to meet different key buying criteria wanted by the customer base. Firms could then have an advantage over competitors by meeting new buying criteria of each market segment.

Discussion Questions

1. Explain how industries are classified within the United States.

2. Identify Porter's 5 forces. What is the primary purpose of these forces?

3. Identify the stages of industry evolution.

4. Why is it important to understand what stage an industry is in?

5. How do firms compete within the different industry life cycle stages?

6. Explain how industry analysis and industry evolution impact firm level strategy.

7. Which force of industry analysis is most important for the Capstone simulation industry?

8. Why will innovation be crucial as we move further into the 21^{st} century?

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Intel Mini Case

Intel is one of the largest semiconductor manufacturers in the world. Intel controls a significant portion of the market share of the industry. Intel revenues and net income has remained relatively flat from 2012 to 2014 (Table 1). Earnings per share increased from $.92 in 2012 to $2.01 in 2014 (Table 1).

Table 1
Intel Financial Results

	2012	2013	2014
Revenues ($ billions)	53.3	52.7	55.8
Net income ($ billions)	11.0	9.6	11.7
Earnings per Share	.92	.77	2.01

Intel's primary growth is driven by the increase in P.C. sales. Over 1 million P.C.'s are sold worldwide each day. Many households have more than one P.C. In addition, P.C. growth has grown at an increasing rate in emerging markets.

The competitive landscape is changing. New categories of products such as smart phones, smart TVs, tablets, in-vehicle systems, and more are connecting to the Internet and becoming more intelligent. Intel is aggressively pursuing opportunities to expand into these new product categories.

In addition, the Intel brand is consistently ranked as one of the most recognizable and valuable brands in the world. In 2013, the Intel brand ranked 9^{th} in the world and had a brand value of $37.2 billion. Intel believes that its brand represents its commitment to moving technology forward. As the world leader in computing innovation, Intel designs and builds the technologies that serve as the foundation for the world's computing devices. Intel believes that it is transforming from a company with a primary focus on the design and manufacture of semiconductor chips for P.C.'s and servers to a computing company that delivers complete solutions in the form of hardware and software platforms and supporting services.

Intel's manufacturing process technology enables it to build processors with increased energy-efficient performance at low cost. Intel has been shipping products built using 32 nanometer (nm) process technology since 2009.

PC shipments grew by double-digit percentages in 2014, but computing is no longer confined to computers. Thousands of other devices powered by Intel technology – cars, cell phones, homes, hospitals, offices, and factories – are other examples. These additional uses may increase Intel's revenue significantly.

Intel believes it has the financial position to grow into these additional businesses.

Discussion Question:

1. How well is Intel positioned against its primary competitors (Samsung Electronics, Qualcomm, and Toshiba) in the semiconductor industry?

Chapter 3

Utilizing Internal Analysis to Build Competitive Advantage Over Rivals

Learning and Assessment Goals

1. Understand what value chain activities should <u>not</u> be outsourced.

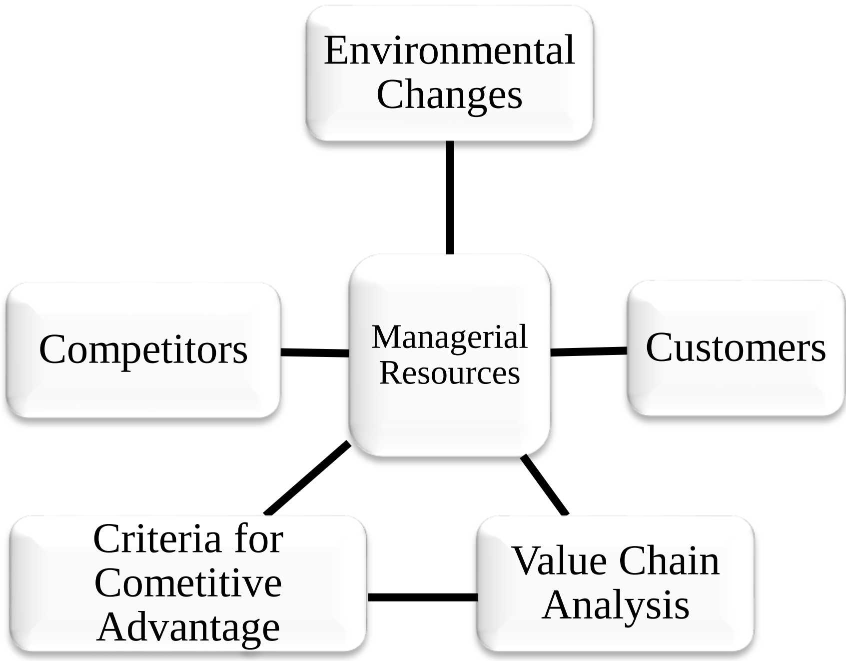
2. Understand how firms can utilize value analysis to obtain competitive advantage.

3. Understand how firms can utilize value analysis to maintain competitive advantage.

4. Understand the key role that technology plays in positioning firms for advantage.

5. Understand how value chain analysis can be used in the Capstone Simulation.

As discussed in Chapter 1, understanding a firm's external environment is critical if the firm is to capitalize upon opportunities or neutralize threats. However, the firm must also conduct an internal analysis to build strengths to exploit competitors' weaknesses. This building of strengths is based upon how a firm develops its resources to achieve positions that are superior to rivals.



The Resource-Based View

Edith Penrose originally developed this perspective in her seminal book, *A Theory of the Growth of the Firm*. To Penrose, resources represented "unused productive services[1]." Resources are stocks of assets that are controlled by the firm[2]. These assets can be either tangible or intangible. Examples of tangible assets would be plant, equipment, trucks, airplanes, and cars. Intangible resources cannot be seen, felt, or otherwise observed. They are deeply rooted in a firm's history. Intangible assets would include brand name, reputation, company culture, and intellectual capital. Intellectual capital represents the collective knowledge of the management team. This resource is extremely important to firm growth and competitive advantage. As such, Chapter 13 is totally devoted to this issue.

For resources to be productive, they must be utilized. Capabilities represent the processes by which resources are utilized[3]. These processes are very important because they can help a firm differentiate itself from rivals. Examples of capabilities would be the ability to transform technology into new products, the development of low cost logistic networks, effective promotion of products, and miniaturization of components and products.

Core competencies are combinations of resources that are linked by capabilities that serve as a source of competitive advantage over rivals. Coke's global branding, Intel's chip technology, and Gillette's technology in men and women's razors are examples of core competencies.

It is not the resources or capabilities that provide competitive advantage; it is how the firm uses these resources and capabilities to generate core competencies[4]. Core competencies emerge over time as firms continually add value to their stock of resources and develop innovative ways of using their resources. Dell Direct is a core competence. This capability allows Dell to charge lower prices because the intermediary network of wholesalers and retailers is eliminated. Caterpillar's dealer network represents a core competence because it allows for worldwide distribution.

Criteria for Competitive Advantage

For capabilities to be judged as core competencies, they must meet four criteria. They must be (1) valuable (2) rare (3) costly to imitate and (4) nonsubstitutable[5].

Valuable capabilities allow the firm to exploit opportunities or neutralize threats in its external environment. By effectively using capabilities to exploit opportunities, a firm creates value for customers. The continuous technological evolution of Intel chips and Microsoft's operating systems are capabilities that customers view as valuable. Lean manufacturing and Just In Time (JIT) inventory are examples of capabilities that have fueled growth for automakers and manufacturing firms.

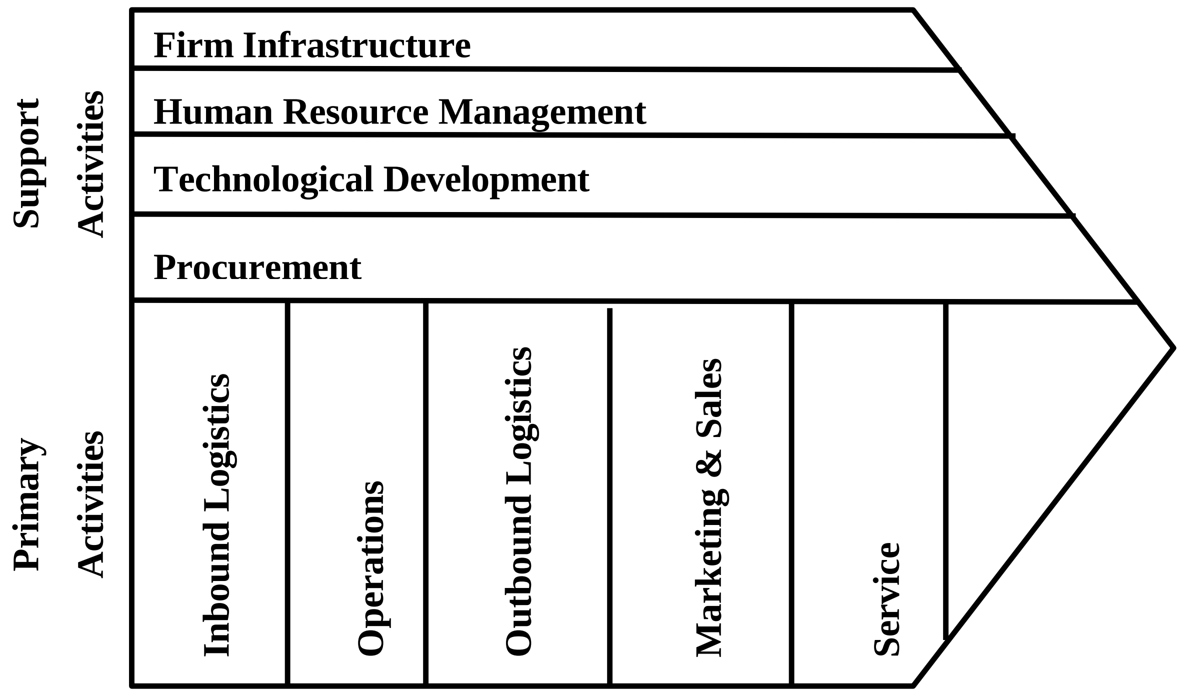
Rare capabilities are capabilities that few, if any, competitors possess. A key question to be answered when evaluating this criterion is, "How many rival firms possess these capabilities?" Rare capabilities would include the development of new drugs by pharmaceutical firms. These drugs have 17 years of patent protection in the United States. The managerial capability to accurately forecast conditions in any emerging industry (e.g. nanotechnology) would be another example of a rare capability.

Costly to imitate capabilities are capabilities that other firms cannot easily develop. For example, the ground/air hub and spoke-operating network that has been developed by Fed Ex and UPS over several decades, is very costly for competitors to imitate. The distribution network that Wal-Mart has developed is costly for competitors to imitate. Highly competent management teams are developed over time. As such, they also represent a capability that is costly to imitate.

Non-substitutable capabilities are capabilities that do not have strategic equivalents. Trust between strategic alliance partners or manages industry knowledge are capabilities that do not have strategic equivalents by competitors. Brand loyalty is another capability that is non-substitutable.

As firms develop more of these capabilities, they increase the probability of generating competitive advantage[6]. Disney's theme parks are an example that may meet all of the above criteria. The theme parks are valuable because they are important to children and parents who have children. Mickey Mouse, Donald Duck, and the Magic Kingdom are part of the Disney culture. The Disney culture is rare because it is unique. Although competitors have attempted to duplicate, (e.g. Six Flags), the Disney experience has been built over decades. As such, it is very costly to imitate. The construction of Disneyland, Disney World, Epcot, and the other specialized parks provide for an experience that competitors have difficulty developing substitutes for. To help identify how internal firm activities can be transformed into core competencies, value chain analysis is conducted.

Figure 3.1
Value Chain Analysis



Source: Adapted with the permission of the Free Press, from *Competitive advantage: creating and sustaining superior performance*, by Michael Porter, 39-40, 1985.

As shown in Figure 3.1, value chain analysis is an internal analysis. Porter[7] originally developed value chain analysis. To Porter, the firm could be divided to segments, each of which could create value. **Primary activities** are involved with a product's physical creation, its sale and distribution to buyers, and its service after the sale. Primary activities follow the product development process beginning with sourcing of raw materials and ending with after sale service. **Support activities** provide the assistance necessary for the primary activities to take place. Either type of activity has the potential to create advantage over rivals. Definitions for each activity are discussed in Table 3.1 and Table 3.2.

Table 3.1
Examining the Value-Creating Potential of Primary Activities

Inbound Logistics
Activities, such as materials handling, warehousing, and inventory control, used to receive, store, and disseminate inputs to a product.

Operations
Activities necessary to convert the inputs provided by inbound logistics into final product form. Machining, packaging, assembly, and equipment maintenance are examples of operations activities

Outbound Logistics
Activities involved with collecting, storing, and physically distributing the final product to customers. Examples of these activities include finished goods warehousing, materials handling, and order processing.

Marketing and Sales
Activities completed to provide means through which customers can purchase products and to induce them to do so. To effectively market and sell products, firms develop advertising and promotional campaigns, select appropriate distribution channels, and price products to be competitive.

Service
Activities designed to enhance or maintain a product's value. Firms engage in a range of service-related activities, including installation, repair, training, and adjustment.

Source: Adapted with the permission of the Free Press, from *Competitive advantage: creating and sustaining superior performance,* by M. Porter, 40-43, 1985.

Table 3.2
Examining the Value-Creating Potential of Support Activities

Technological Development
Technological development takes many forms, such as manufacturing processes, basic research, product design, and servicing procedures. Activities by which a firm's products and/or processes are improved.

Human Resource Management
Activities involved with recruiting, hiring, training, developing, and compensating all personnel.

Firm Infrastructure
Firm infrastructure includes activities such as general management, planning, finance, accounting, legal support, and governmental relations that are required to support the work of the entire value chain. Through its infrastructure, the firm strives to effectively and consistently identify external opportunities and threats, and to identify resources and capabilities that can be developed into core competencies.

Procurement
Activities completed to purchase the inputs needed to produce a firm's products. Purchased inputs include items utilized during the manufacture of products (e.g., raw materials and supplies, as well as fixed assets—machinery, laboratory equipment, office equipment, and buildings

Source: Adapted with the permission of the Free Press, from *Competitive advantage: creating and sustaining superior performance*, by M. Porter, 40-43, 1985.

It is expected that the role of technology may transform many value chain activities in the future to further lower costs or create differentiation. Technological development consists of activities that result in improvement in a firm's products and/or the processes used to manufacture them. Product R&D consists of concentrating on ways of making products better. Table 3.3 is a value chain analysis of Berkshire Hathaway's 2009 acquisition of BNSF. Warren Buffett is the CEO of Berkshire Hathaway.

Table 3.3
Value Chain Benefits Resulting from Berkshire Hathaway's 2009 Acquisition of BNSF

Primary Activities

Value Chain Activity	BNSF Position
Inbound Logistics	• Largest hauler of food products (e.g. corn, coal for electricity) • Hauls goods imported from Asia
Operations	• One train can haul the equivalent of 280 fully loaded trucks
Outbound Logistics	• Large exporter of goods to Asia • Distributor for Berkshire Hathaway's products to final consumers
Marketing and Sales	• Access to Powder River Basin provides a high quality of coal • Greater efficiencies result in lower prices
Service	• Reduction in greenhouse emissions

Support Activities

Value Chain Activity	BNSF Position
Technology Development	• Improvements in the manufacturing in locomotives and freight cars • Development of information systems • Electronic fuel injection • Remote control technology
Human Resource Management	• Maintaining the existing BNSF management team
Firm Infrastructure	• 2^{nd} largest railroad in North America • Extensive existing network west of the Mississippi River
Procurement	• Coal is used for supplying Mid-American Energy Holdings Co. for Berkshire Hathaway business

Warren Buffett acquired the Burlington Northern Santa Fe (BNSF) for $34 billion. BNSF is the 2nd largest North American railroad which has extensive coverage west of the Mississippi River. From a value chain perspective, this acquisition provides several value chain benefits. One of the most important benefits that the acquisition will provide is **human resource management**. Matt Rose, CEO of BNSF and his entire management team has been maintained. Matt Rose and his management team have decades of experience in the rail industry.

Buffett has acquired a firm that can be utilized to provide substantial **inbound and outbound logistics capabilities**. BNSF is the biggest hauler of food products like corn, and coal for electricity, making it an indicator of the country's economic health. The railroad also ships a large amount of consumer goods – including items imported from Asia. This transpacific logistic capability is of crucial importance because of the growth of China. From an **inbound logistical perspective**, BNSF has established positions within the Powder River Basin, which has the highest quantity of coal deposits in the world. In addition, from an **inbound logistical perspective** Berkshire Hathaway own major utilities that rely on coal for its Mid-American Energy Holdings Co. Rail is a much cheaper mode of transportation than truck. As stated earlier, one train can haul the equivalent of 280 fully loaded trucks.

From an **infrastructure** perspective, railroads have major cost and environmental advantages over trucking firms, their main competitor. Last year BNSF moved each ton of freight it carried a record 500 miles on a single gallon of diesel fuel. That's three times more fuel-efficient than trucking. Rail firms also provide sustainability benefits because of reduced greenhouse emissions and a much smaller need for imported oil. When traffic travels by rail, society benefits.

This acquisition also provided **service** benefits. Porter defines service as "activities designed to enhance or maintain a product's value." In a broad sense, efficiency and reducing greenhouse emissions would provide service benefits not only for rail customers but for society as a whole.

BNSF was the first railroad to utilize technology to provide operational benefits via **technological innovations** to improve the manufacture and repair of locomotives and freight cars, develop the maintenance of right-of-way, and the quality of information systems. Locomotives were emerging with electronic fuel injection and increased fuel efficiency. BNSF was also the first railroad to develop remote control technology utilizing a portable transmitter, called the operator control unit, to communicate with a computer, or receiver, in the cab of the locomotive. An on-board computer operates the locomotive based on the signals received from the employee on the ground.

Value Chain Analysis and Capstone Simulation

Value chain analysis is important because it can be applied to all primary and support activities. Table 3.4 illustrates how value chain analysis can be utilized within the simulation.

Table 3.4
Value Chain Analysis Via Simulation

Value Chain Activity	Simulation Component
Support Activities	
Technology Development	• Creating new products • Repositioning established products • Reducing R&D cycle times
Human Resource Management	• Recruiting, training, and compensating employees • Labor Negotiations
Firm Infrastructure	• Financial analysis • Sources and uses of funds
Procurement	• Purchase / sale of plant and equipment
Primary Activities	
Inbound Logistics	• Implement total quality management (TQM) initiatives
Operations	• Implement automation • Implement TQM
Outbound Logistics	• Developing distributor network
Marketing & Sales	• Developing promotion budget • Developing sales budget • Developing sales forecasting • Developing price positioning
Service	• Improving Performance: Mean Time Before Failure (MTBF)

Technology Development

The simulation incorporates both product and process R&D. The R & D spreadsheet of the simulation allows firms to examine the cost trade-offs of creating new products versus improving existing products. In general, the more extensive a product needs to be modified, the more desirable it may be to develop a new product. However, new products may take longer to reach the market. The R&D spreadsheet allows for examination as to when products would be released versus the time to redesign existing products. The cost versus time to market trade-off should be the criteria by which firms decide whether to revise existing products or introduce new ones. The R & D spreadsheet allows an examination of this trade-off for all products in all segments.

Some of the Total Quality Management (TQM) initiatives result in a reduction in R&D cycle time. TQM is an optional module of the Capstone Simulation.

Human Resource Management

As discussed by Porter, human resource management is activities involved with recruiting, training, developing and compensating personnel[9]. The simulation addresses human resource management as a separate module of the production spreadsheet.

The human resource module of the simulation allows for recruiting, training, and compensating employees. Human resources that are better trained will result in more effective decision-making. This is because human resources "learn by doing[10]." As human resources "learn by doing," they become better and/or more efficient with the performances of their duties. As employees become better at performing their responsibilities, they develop the capability to teach others. Part of Chapter 13, Strategic Leadership Decision Making, is devoted to this topic.

Human resource management also encompasses labor relations and negotiations. Labor negotiations are a separate module of the simulation.

Firm Infrastructure

To Porter, firm infrastructure includes activities such as general management, planning, finance, accounting, legal support, and governmental relations that are required to support the work of the entire value chain[11]. Through its infrastructure, the firm strives to effectively and consistently identify external opportunities and threats, and develop resources and capabilities to capitalize on these opportunities and neutralize threats. A firm's ability to capitalize on opportunities and minimize threats is dependent upon the firm having the financial resources to fund growth. An understanding of a firm's growth options is achieved by analyzing a firm's income statement, balance sheet, and statement of cash flows. A complete analysis of financial statements will be addressed in Chapter 14, Wealth Creation.

Investments in plant and equipment and sale of plant and equipment are addressed as part of the finance spreadsheet of the simulation. Thus, the finance spreadsheet allows for different capital budgeting alternatives to be evaluated. Capital budgeting is the analyzing and ranking of possible investments in fixed assets such as land, buildings, and equipment in terms of the additional outlays that will result from each investment. Firms prepare capital budgets and rank them on the basis of some accepted criteria or hurdle rate (for example, years to pay back investment, rate of return, or time to break-even point) for the purpose of strategic decision making[12]. The finance spreadsheet allows for different types of vehicles to finance investments. Firms may issue common stock and/or acquire long or short term debt financing to fund expansion activities.

Procurement

To Porter, procurement consists of activities completed to purchase the inputs needed to produce a firm's products[13]. Purchased inputs include items fully consumed during the manufacture of products (e.g. raw materials and supplies), as well as the purchase of fixed assets—machinery, laboratory equipment, office equipment, and buildings. The purchasing and selling of plant and equipment is performed within the production spreadsheet of the simulation. Purchasing plant and equipment is important for generating economies of scale. Economies of scale are efficiency gains that result from larger firm size.

Inbound and Outbound Logistics

To Porter, logistics involves both the transportation of raw materials to manufacturing facilities and the transportation of finished goods to final consumers[14]. The logistics component of Porter's value chain is addressed within the Total Quality Management (TQM) initiatives of the simulation. Inbound logistics is addressed by the Just-In-Time (JIT) initiative. JIT is an integrated set of activities designed to achieve high volume production using minimal inventories of raw materials, work-in-process, and finished goods. JIT helps to reduce material costs by having only the needed materials available for manufacturing processes.

CCE (Concurrent Engineering) and CPI (Continuous Process Improvement) represent two of the TQM initiatives the simulation uses to reduce material costs. CCE could be utilized to ascertain which vendors are either more efficient or better qualified to source raw materials. CPI can be utilized to ascertain whether a firm should continue to outsource its inbound transportation network versus the firm developing its own transportation network for obtaining raw materials.

Outbound logistics is a critical element of a firm's distribution network[15]. Distribution is addressed within the advanced marketing module of the simulation. This module allows for increasing or decreasing the number of distributors. Increasing the number of distributors improves infrastructure. An advanced distribution system allows products to reach final consumers earlier and to increase the service area offered by the firm.

Operations

To Porter, operations are activities needed to convert the inputs provided by inbound logistics into final product form[16]. The objective is to create an efficient operations system. The operations aspect of Porter's value chain is addressed in the production spreadsheet. The simulation allows for production to be scheduled by product line. For some lines, efficiency is important. These product lines normally are for products that are more price sensitive than others. For price sensitive products, production can be set at high levels of automation to increase efficiency. However, as automation is implemented, production processes tend to become more rigid. As they become more rigid, firms are less able to respond to changing customer needs.

Several of the Total Quality Management (TQM) initiatives allow for the creation of efficiency. The key is to obtain lower costs than competitors. Production efficiencies lower variable costs that allow firms to reduce price and still maintain profit margins on these products.

Marketing and Sales

To Porter marketing and sales are activities to induce consumers to purchase the firm's products/services[17]. The ability to forecast sales is a critical aspect of marketing and sales. Correct sales forecasts (Chapter 6: Analysis of Markets and Positioning) are crucial because they allow senior management to allocate resources to meet demand and minimize inventory-carrying costs.

To effectively market and sell products, firms develop advertising and promotional campaigns, select appropriate distribution channels, and change the composition of their sales force. Within the simulation, advertising and promotion are addressed as an advanced marketing module that is linked to the marketing spreadsheet. The optional marketing module allows for the selection of different types of promotion (print media, direct mail, web media, email, and trade show) that is applied to different types of products. The objective is to increase customer awareness. This module also allows for the allocation of outside and inside sales employees to specific product lines. Firms that have new products may want to increase the number of outside sales employees to build customer awareness. Increasing the number of inside sales employees tends to assist in establishing longer-term relationships with existing customers. Maintaining these relationships is important because the firm can identify changing consumer preferences more quickly than competitors who have not invested in these relationships.

The marketing spreadsheet allows for price changes on a product-by-product basis. For products that are price sensitive, price needs to be set at levels that are acceptable to customers but which permit the firm to make a profit. As discussed above, for price sensitive products, automation needs to be considered because automation improves efficiency and reduces per unit variable costs.

Service

To Porter, service consists of activities designed to enhance or maintain a product's value[18]. Many automotive and tire manufacturers provide warranties which guarantee certain levels of service performance. Service is critical because it has a direct impact upon a firm's reputation. Bridgestone / Firestone is an example of reputation having a significant negative impact upon firm sales and profitability. Light bulbs that last two years or more are an example of a positive service attribute. Some firms attempt to differentiate from a service perspective (e.g. Maytag, Otis Elevator).

Service is addressed in the R & D spreadsheet. The simulation views service as Mean Time Before Failure (MTBF). MTBF measures how long a product is expected to last before it fails. As more funds are allocated to MTBF, the life of the product increases. The R & D spreadsheet permits MTBF to be adjusted on a product-by-product basis. Costs for changing MTBF are calculated on the R & D spreadsheet. As MTBF is increased, the product will last longer. This aspect of durability is a critical factor for products in the performance segment of the simulation.

As discussed above, the simulation addresses all aspects of Porter's value chain. The key to value chain analysis is to create value and/or efficiencies from each activity in the chain. The creation of value may generate differentiation from competitors. The creation of efficiencies allows firms to compete favorably in price sensitive segments. In this way, firms can generate advantage by performing value chain activities superior to competitors.

Global Outsourcing

At times it may not be advisable to perform all primary and support value chain activities within the firm. In some cases, outsourcing may be a viable alternative. Outsourcing is based upon the principle that a third party may be better at a specific value chain activity than the firm. For example, most of the major rail (e.g. CSX) and airfreight (e.g. Fed Ex) firms have extensive logistics services that provide distribution to customers worldwide. Firms such as Komatsu outsource sub assembly manufacturing to Southeast Asian markets due to the difference in labor rates and insurance coverage between Japan and these markets. The key to outsourcing is to select only value chain activities that are not core competencies of the firm. Outsourcing activities that are not core competencies may allow the firm to fully concentrate on those activities that are core competencies. Outsourcing core competencies could provide competition with the knowledge to build similar competencies.

Outsourcing must be done with care. For example, within the U.S. an increasing number of jobs are lost each year as a result of outsourcing. Firms need to be fully aware of the significant labor relations' issues that can result from outsourcing. While not a solution to the problem of displaced workers, technology is transforming many areas that had previously been outsourced. The creation of robotic sub assembly processes is one such transformation.

Global outsourcing saves corporations time and money. Outsourcing has grown by 4% in 2010, and has sustained an average annual growth of 9.7% since 2005.[19]

The outsourcing outlook for the coming years looks promising. As the world emerges out of the global recession, outsourcing should return to higher growth rates. According to Datamonitor, the market will grow at 7.2% in 2011 with $660 billion in revenue by the end of 2011. By 2014 it is expected that the market value will be around $875 billion with 10% growth.[20]

A great majority of firms have experienced declines in market growth due to the 2007-2010 global recession. Because of the significant savings that outsourcing offers, companies are able to stay in business by outsourcing more.[21] Outsourcing helps to save money and improve the bottom line.

U.S. Sourcing Line, a global data base firm, has compiled the most comprehensive online database of outsourcing country statistics to aid managers in their outsourcing decisions.[22] Each country has been scored across dozens of key statistics which fall into three broad areas of (1) Cost Competitiveness, (2) Resources & Skills, and
(3) Business & Economic Environment.[23]Based on their (Sourcing Line) research, the top outsourcing destinations are identified in Table 3.5.

Table 3.5
Post Recession Most Popular Outsourcing Locations (2011)

World Rank	Country
1	India
2	Malaysia
3	China
4	Brazil
5	Russia
6	Ukraine
7	Philippines
8	Indonesia
9	Thailand
10	Mexico
11	Chile
12	Argentina
13	Czech Republic
14	South Korea
15	United States
16	Canada

The presence of developing markets dominates this list. The emerging markets (BRIC) ranked 1, 3, 4, and 5 are the most popular outsourcing locations in 2011. Malaysia is ranked as the number 2 outsourcing location. Malaysia (#2) is an emerging market where English is a second language. Fully developed markets such as the U.S. and Canada are ranked 15 and 16. Western European markets are not listed in the top 16 countries.

Discussion Questions

1. Explain the difference between a resource, a capability, and a core competence. Which is more important for developing competitive advantage?

2. Explain how a firm of your choosing can meet all of the criteria for obtaining competitive advantage.

3. Explain the fundamental difference between primary and support activities in Porter's value chain. Which are more important?

4. With respect to the perceptual map example, would positioning at the intersection of the vertical and horizontal be recommended? Explain why or why not.

5. With respect to the simulation, which value chain activities should be focused upon price sensitive products? Explain.

6. What specific value chain activities are important to the performance market segment of the simulation? How should these activities be developed?

7. Which elements of Porter's value chain were not acquired as result of Buffett's acquisition of BNSF?

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Ryder Mini Case

Ryder is an American-based provider of transportation and supply chain management solutions with global operations. Ryder specializes in (1) fleet management, (2) supply chain management (SCS) and (3) dedicated contract carriage. Ryder operates in North America, the United Kingdom, and Asia.

Ryder's fleet management business segments is its largest business segment. This segment consist primarily of full service leasing, contract maintenance, commercial rental and fleet support services. Ryder's Supply Chain Management (SCS) segment is where Ryder owns and maintains the trucks and the customer decides where they go. These solutions are logistics management services designed to optimize a customer's supply chain. Ryder's dedicated contract carriage is a combination of services. In this segment, Ryder combines full service leasing and supply chain management.

Ryder provides service to a large number of industries: automotive, electronics, transportation, grocery, wood products, food service, and home furnishing.

Ryder's financial data is as follows:

Table 1
Ryder Financial Data

Year	**2013**	**2012**
Revenue ($ billions)	6.42	6.25
Net Income ($ millions)	237	209
Earnings/Share	4.53	4.09

Discussion Questions:

1. What areas of its business should Ryder focus upon?

Chapter 4

Business Level Strategy

Learning and Assessment Goals

1. Understand the concept of business level strategy.

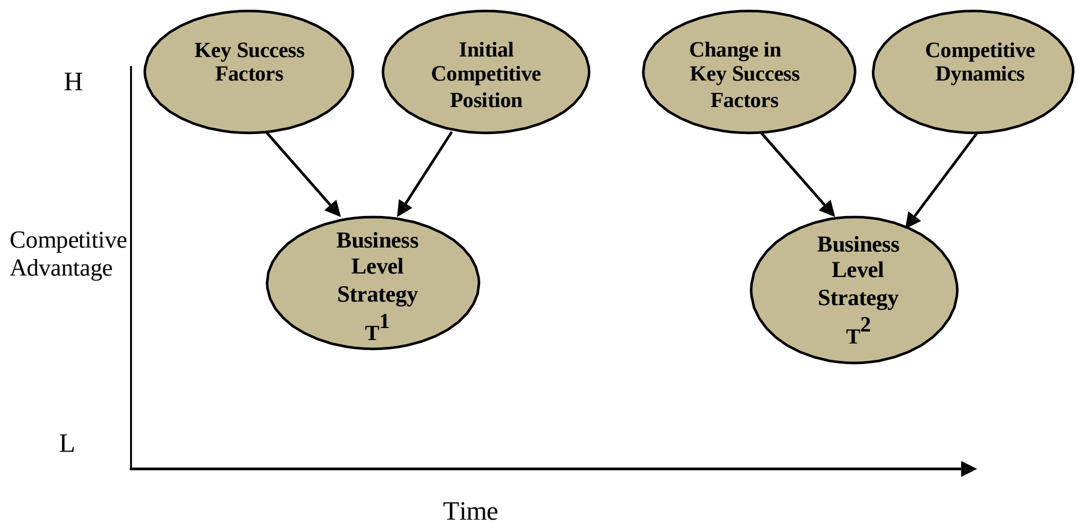
2. Understand how to make decisions to achieve competitive advantage. Understand what decisions need to be made to maintain competitive advantage.

3. Understand how competitive dynamics can be utilized to maintain competitive advantage.

Key Success Factors

This chapter examines business level strategies. Business level strategies are focused on how a firm achieves competitive advantage within an industry. Key success factors and initial conditions dictate a firm's initial business level strategy. Key success factors are the set of criteria that determine buying decisions[1]. Developing a business level strategy to meet key success factors enables a firm to gain competitive advantage. To maintain competitive advantage, a firm will modify its business level strategy based upon changes in key success factors and competitive dynamics. Competitive dynamics are actions and reactions of firms within an industry over time. This general relationship is illustrated in Figure 4.1.

Figure 4.1
Using Business Level Strategies to Gain and Maintain Competitiveness



Key success factors differ on an industry-by-industry basis. For example, taste is a key success factor within the soft drink industry, whereas durability is a key success factor within the athletic shoe industry. Determining key success factors (referred to as key buying criteria in the simulation) is an important component of firm growth. Knowledge of key success factors can help a firm position itself better with respect to competition[2]. An important element of growth is the ability of a firm's managers to identify key success factors and to develop resources and capabilities to adapt to these factors as they change over time.

Determining Key Success Factors

Various stakeholders need to be contacted to effectively determine key success factors. One place to start is with the senior management team. It is the responsibility of the senior management team to identify key success factors in the current time period and to develop resources and capabilities to meet these factors.

It is also the responsibility of senior management to monitor key success factors over time. As such, the perspective of senior management is crucial if firms are to utilize key success factors to grow. In many cases, senior managers have substantial industry experience. Therefore, these senior managers cannot only identify the existing set of key success factors but also provide a perspective for how they have changed over time within a specific industry. They have keen insights into how these factors may change in the future. The sales force is an important source of information concerning key success factors.

The sales force has responsibility for direct customer contact. They provide the best source, within the firm, of information on customer needs and wants. They are an excellent source of information not only of existing key success factors but also of factors that may be emerging, as consumer needs change. The sales force can also provide an understanding of which factors are more important from the customer's perspective. The sales force may also obtain information from customers as to which firms are better at satisfying specific key success factors.

Utilizing Key Success Factors over Time

In order to grow over time, a firm must develop resources and capabilities to meet the key success factors in the current time period and continuously develop new resources and capabilities based upon the direction in which the key success factors evolve over time.

Key success factors must be viewed from a longitudinal perspective. A successful stream of strategy decisions over time must be founded on the ability to identify changes in key success factors. Changes in key success factors require the firm to make adjustments in its strategy. Revising a firm's strategy to focus upon changing key success factors may allow the firm to gain an advantage over rivals. An understanding of the evolution of key success factors over time can provide the basis for an "emergent strategy"[3].

To capitalize upon changing environmental opportunities, the firm must have the flexibility to develop its resource base to respond to emerging key success factors. This identification and development ability is as important for the future as it is in the current time period. The greater the ability of the firm's managers to identify the future key success factors better than its competitors, the quicker the firm can develop resources and capabilities to meet these emerging key success factors before its competitors. There are several generic business level strategies that firms can develop to become competitive.

Generic Business Level Strategies

Business level strategies consist of an integrated set of actions that allow firms to become and remain competitive within an industry[4]. Porter's framework provides a foundational matrix for identifying how firms can achieve advantage within an industry. The matrix identifies two primary sources by which firms can achieve advantage: (1) low cost and (2) uniqueness. The matrix is illustrated in Figure 4.2.

Figure 4.2: Generic Business Strategies

		Competitive Advantage	
		Cost	**Uniqueness**
Competitive Scope	**Broad Target**	**Cost Leadership**	**Differentiation**
	Narrow Target	**Focused Low Cost**	**Focused Differentiation**

Source: Adapted with the permission of The Free Press, an imprint of Simon & Schuster Adult Publishing Group, from *Competitive advantage: creating and sustaining superior performance* by Michael Porter, 12. 1985.

Cost leadership

Cost leadership is based on high-volume sales of low-margin items. High volume products are usually no-frills items. However, they must be of acceptable quality and have features that meet consumers' needs. Superior advantage in a cost leadership position comes from creating a significant and sustainable cost gap, relative to competitors, by managing costs to achieve economies of scale. This cost gap translates into superior margins when the firm maintains prices at or near industry averages. UPS (United Parcel Service) and Wal-Mart are two firms that are the lowest cost producers within their respective industries. These firms would fall into the cost leadership position because their target markets (customers served) are international in scope.

Focused low cost

Firms that service a narrow target market achieve a focused low cost position. Examples of focused low cost would be Boone's Farm, Dollar General, and online brokerage firms. Boone's Farm's target market consists primarily of those individuals who have little disposable income and enjoy drinking wine. Dollar General focuses upon target markets in selected cities that prefer to shop at small discount stores. Online brokerage firms focus on investors that are heavy users of the Internet. These firms meet the needs of specific target markets.

Differentiation

A position of uniqueness is based on sales of high-margin items. Customers are willing to pay a premium price for a differentiated product or service because the item satisfies some specialized need. Uniqueness can be achieved through design or brand image, technological features, customer service, specialized dealer networks, product innovations, and a high level of quality, and/or better relations with suppliers than competitors. The key to a successful differentiation strategy is to offer a broad range of customers something for which they are willing to pay substantially more than the cost incurred by the firm creating it. Microsoft and Intel are examples of firms that utilize differentiation strategies. These firms are multinational firms servicing very broad target markets with superior quality products.

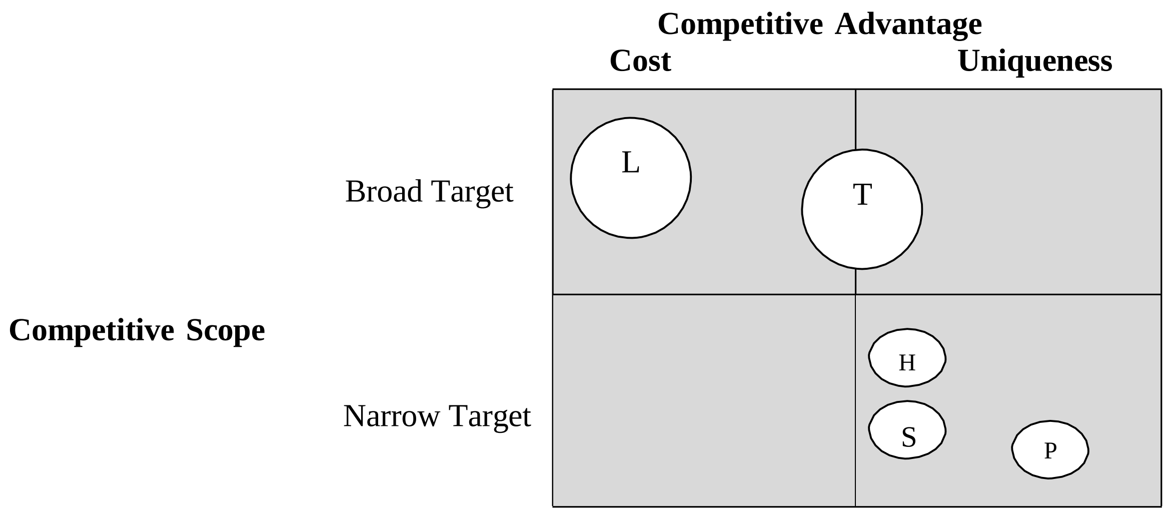
Focused differentiation

Firms that follow a focused differentiation strategy primarily rely on brand image. Rolex, Gucci, and Rolls Royce are examples of firms that follow focused differentiation strategies. These firms focus on special segments of an industry. This strategy is oriented toward providing superior quality to those customers that value uniqueness.

The question arises as to whether a firm can occupy a position at the center of the matrix. Porter would view this approach as likely to lead to a "stuck in the middle" position. Such a position may prevent the firm from establishing a distinct advantage over rivals. The resources that are needed to support a **cost** position (orientation toward efficiency) and a uniqueness position (orientation toward **differentiation**) are quite different. In addition, different strategies may be needed for broad and narrow markets.

These generic strategies help firms to gain competitive advantage. Maintaining the position is as important as gaining an initial position of advantage. Competitive advantage results from gaining a position of superiority versus rivals and maintaining that position over time[5]. Figure 4.3 is an example of the application of generic business level strategies to the Capstone Simulation.

Figure 4.3
Business Level Strategy and Capstone Simulation



L = Low end (39% of industry)
T = Traditional (32% of industry)
H= High End (11% of industry)
P = Performance (9% of industry)
S = Size (9% of industry)

The low-end segment (L) is a **cost leadership** market representing 39 percent of units produced within the industry. The most important key success factor for the low- end market is price. To maintain a position of advantage over time, the firm must implement activities that are efficiency-based. The implementation of Total Quality Management (TQM) is one such activity. The implementation of several TQM initiatives will help drive down costs. This action is crucial for success in the low-end market.

The **traditional** segment of the industry is another broad segment of the industry because it represents 32 percent of the industry demand. The key success factors for this segment include both cost and uniqueness criteria oriented to a broad target market. The business level strategy for this segment must include a low cost position coupled with a uniqueness component. One approach to obtaining this position is through the implementation of flexible manufacturing systems. A flexible manufacturing system is a computer-controlled process used to produce a variety of products in moderate, flexible quantities with a minimum of manual intervention.

The high end, performance, and size segments are positioned to follow a **focused differentiation** strategy. Each segment will not be developed with the **same focused differentiation** strategy. Each segment places different importance on key success factors to maintain advantage. An important key success factor of the high-end segment is new product development. Durability is important to the performance market. Market positioning is a key success factor for the size market. As such, a distinct business level strategy must be developed for each segment.

Porter's generic business strategy model has been challenged because it provides a static perspective[6]. The incorporation of key success factors introduces a dynamic component into Porter's generic business strategies. An understanding of the evolution of key success factors over time will allow the firm to be able to continuously meet key success factors as they change. As such, the firm can develop a dynamic strategy to maintain advantage over time. By incorporating the time dimension, firms can alter their positions in response to changing market conditions (e.g. key success factors). By understanding how each market evolves over time, the firm can maintain competitive advantage over rivals. A firm's business level strategy must take into consideration the action and reaction of competitors. As such, an understanding of competitive dynamics is important for sustaining a firm's strategy over time. How firms grow over time is important.

Walmart's Expansion

Walmart is a firm which has primarily grown by internal development. In the 1960's Walmart grew by more fully developing its U.S. customer base. The U.S. customer base included all 50 states by 1993.

However, this was not Walmart's primary focus during the mid 1970's to late 1980's. This time period was utilized primarily for product development. As shown in Table 4.1, Walmart engaged in a period of new product development. In 1975, Walmart introduced Walmart pharmacy, auto service, and jewelry divisions within its store. These divisions provide Walmart with new products to Walmart customers which generated higher return than Walmart's traditional business. These businesses also led Walmart to its primary focus of one-stop shopping.

From 1991 to 2010, Walmart expanded into international markets. As can be shown from Table 4.1, Walmart has established a significant international presence.

Table 4.1 **Walmart's Expansion**	
Year	**Results**
1962	1st store opened in Rogers, AK
1971	U.S. geographic expansion
1975	Introduced Wal-mart pharmacy, auto service, and jewelry divisions
1983	1 hour photo lab
1987	Developed and introduced satellite communication system
1988	First superstore opened in Washington, MO
	Introduced bar code scanning
1991	Expansion into Mexico
1993	Stores opened in all 50 states
1994	Opened stores in Hong Kong
1995	Opened stores in Argentina
1996	Opened stores in China
1997	Opened stores in Germany and Korea
Early 2000's	Increased international presence
2005	Commitment to environmental sustainability: Created experimental stores that save energy, conserve natural resources and reduce pollution
2006	Opened stores in Japan
2007	Opened stores in Brazil
2009	Significant international expansion
2010	Further international expansion into Brazil, China, and Mexico

Table 4.2 Walmart			
Year	2014	2013	2012
Revenue ($ Billions)	476.29	468.65	446.51
Net Income ($ Billions)	15.91	16.96	15.73
EPS	4.85	5.01	4.53

Walmart has experienced growth in the period from 2012 to 2014 in revenue, net income and EPS.

Discussion Questions

1. Explain what business level strategy your firm should pursue in the Capstone Simulation on a segment-by-segment basis. Explain why.

2. Which firm would have a more sustainable advantage in the Capstone Simulation: one that concentrates on cost leadership or focused differentiation? Explain why.

3. Why do key success factors need to be viewed over time? What happens if they are not? Provide an example of a firm that has viewed these factors over time and one that has not.

4. Why has Wal-Mart been successful both before the global economic recession and during the global economic recession (2007-2010)?

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Dell Mini Case

Dell is a technology company. They offer a broad range of product categories, including mobility products, desktop PCs, software and peripherals, servers and networking, and storage. In addition, their services include a broad range of configurable IT and business related services, including infrastructure technology, consulting and applications, and business process services.

Dell operates in an industry in which there are rapid technological advances in hardware, software, and service offerings. They compete based on their ability to offer profitable and competitive solutions to its customer base. Dell attempts to build long-term relationships with customers. These relationships may allow them to recognize changing customer needs faster than their competitors.

Dell attempts to balance their mix of products and services to optimize profitability, liquidity, and growth. Dell believes this strategy will lead to competitive advantage.

Dell has four primary business segments: (1) large enterprises, (2) public sector, (3) small and medium size business, and (4) commercial consumers. Large enterprises consist of multi-national firms who have very broad information technology (IT) needs. Public customers are educational institutions, government, health care, and law enforcement agencies. Small and medium businesses have basic IT needs. Commercial customers are individual customers. Table 1 provides Dell's financial results from 2011 to 2013.

Table 1
Dell

Year	2013	2012	2011
Revenue ($ Billions)	56.94	62.07	61.49
Net Income ($ Billions)	2.37	3.49	2.63
EPS	1.35	1.88	1.35

On September 12, 2013, Dell stockholders approved the proposal in which Michael Dell, Dell's Founder, Chairman and CEO, will acquire Dell in partnership with global technology investment firm Silver Lake Partners. The merger transaction closed on October 29, 2013, and the company has delisted its common shares from the NASDAQ Stock Market. Per the merger agreement, Dell shareholders are entitled to receive $13.75 in cash, in addition to a special dividend of $0.13 per common share.

Discussion Question

1. Why was the above action taken?

Chapter 5

Applying Game Theory to Collective Bargaining and Competitive Dynamics

Learning and Assessment Goals

1. Understand the general concept of game theory.
2. Understand how game theory can be used in several business settings?
3. Understand how game theory can be applied to collective bargaining.
4. Understand how SWOT analysis can be utilized to capitalize upon competitors' weaknesses. In addition, understand how SWOT analysis can be utilized to convert opportunities into strengths.

Source: Adapted with Permission of Journal of Transportation of Law, Logistics and Policy, Applying Game Theory to Collective Bargaining by Michael L. Pettus. 2006

Thomas Schelling and Robert Aumann won the Nobel Prize for economics in 2005 for their work on game theory.

While Schelling and Aumann applied game theory to social and political problems, game theory has been utilized to explain many business issues. Game theory is based on the concept that rivals have both an incentive to cooperate and an incentive to gain from competitor's actions.[1] The dynamics of game theory can be introduced using the prisoner's dilemma example shown in Figure 1, on the next page.

The prisoner's dilemma assumes that if two individuals are simultaneously arrested and charged with the same crime, both individuals have an incentive to behave opportunistically.

Both individuals are given incentives for cooperating with the police.

Assume each prisoner is given the option to confess in exchange for a five-year prison sentence instead of a 10-year term if found guilty at trial.

Another option given each prisoner is to confess to the crime and testify against the other prisoner – but this is available only to one of the prisoners on a first come basis. In return for his cooperation to convict the other prisoner, the first prisoner will receive a one-year sentence. The individual not confessing would receive a longer 10-year sentence if the other prisoner testifies against him.

Both prisoners also have an incentive not to confess as neither will receive prison time if found innocent at a trial. However, there is an incentive for each to take the deal and testify against the other – the options each prisoner faces is on Figure 1.

Figure 1

The Prisoner's Dilemma

Prisoner 1 (P_1)

	Does Not Confess	Confess
Does Not Confess	Possible Acquittal	P_1 (10)* P_2 (1)
Confess	P_1 (1) P_2 (10)	P_1 (5) P_2 (5)

Prisoner 2 (P_2)

*( ) refers to the prison term measured in years.

Game theory is more often used to explain how firms develop defensive strategies,[2] to evaluate foreign direct investment (FDI) options,[3] is useful in understanding competitor's moves within industries,[4] and has been used to determine competitive product positioning.[5] Game theory has also been applied to understand how cooperation and performance can be improved between strategic alliance partners.[6]

John Nash, John Harsanyi and Reinhard Selten, won the 1994 Nobel Prize in economics by applying game theory to conditions where there is no cooperation between parties. Nash's analysis of non-cooperative parties has been named the Nash equilibrium.[7]

GAME THEORY APPLIED TO COLLECTIVE BARGAINING

Collective bargaining is a process that occurs over time as both sides (management and labor) make decisions and respond to the actions of the other. Each party has an incentive to cooperate with one another for mutual benefit and an opportunity to exploit opportunities created by each party.

Collective bargaining units survey members, review similar labor-rate contracts recently negotiated, and review the employer's financial health to establish a negotiating range as depicted in Figure 2 when it is time for a collective bargaining negotiation.

Labor’s negotiating range consists of:

- (1) The pay rate ($28) that labor would like to achieve;
- (2) The lowest rate ($24) at which union members would ratify a new contract.

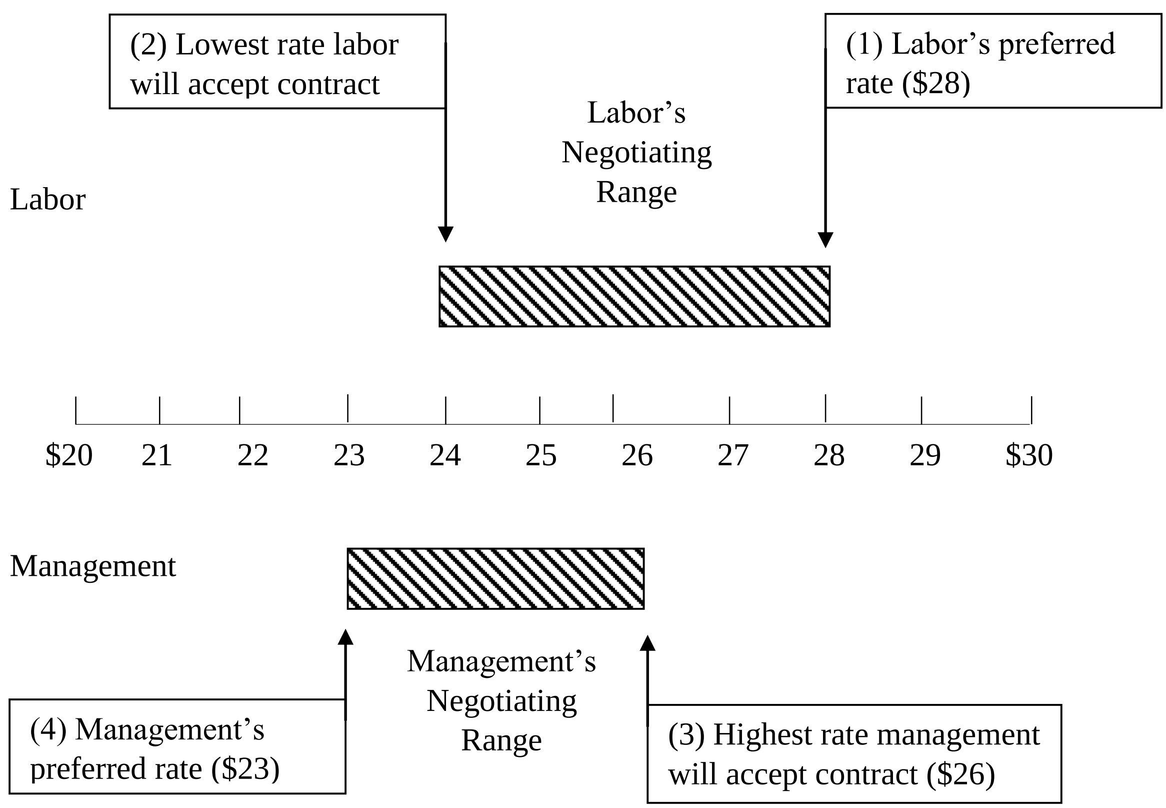
Management similarly examines labor contracts of its competitors and others in industry to determine its own range:

- (3) The highest rate ($26) management will agree to;
- (4) Management’s preferred ($23) wage rate.

Thus, labor’s negotiating range is between $24 to $28; management’s negotiating range is between $23 and $26.

Figure 2

Game Theory and Collective Bargaining



Assume management's initial position is $20. The union would reject this because labor's lowest acceptable rate is $24.

Assume labor's counter proposal is $30. Management would not accept this wage because it represents a $4 increase above the top of management's negotiating range.

It is important to understand what each side knows and does not know.

Table 1 summarizes this information.

Table 1
Summary of Key Issues

Issues	Known	
	Management	Labor
1) Labor's preferred wage rate.	No	Yes
2) Lowest wage at which labor would accept a contract.	No	Yes
3) Management's preferred wage rate.	Yes	No
4) Highest wage at which management will accept a contract.	Yes	No
5) Lowest accepted bid approved by a competitor within the industry.	Yes	Yes
6) Highest accepted bid approved by a competitor within the industry.	Yes	Yes

Because management does not know the point at which labor would not accept a contract, management decides to begin at $22. Labor would reject this offer because it is below the point ($24) at which labor would accept a contract.

Labor knows the highest accepted bid approved by a competitor is $26 and offers a bid of $26. This is within management's negotiating range; however, management does not know the lowest point at which labor would accept a contract.

Management may counter with an offer at $23. Because $23 is below the lower bound of labor's negotiating range, the bid would be rejected.

This process would continue until a wage is within both parties negotiating range ($24-$26). Otherwise, a higher or lower bid by one side could lead to a costly (for both sides) work stoppage.

From a game theory perspective, each side has asymmetric information (Table 1). Either side would have been marginally better off with complete information. If management knew that labor's lower bound was $24, management could have obtained a contract at $24 rather than $26. If labor knew the management range was up to $26, labor could have settled at a wage of $26.

In the same manner in which labor and management attempt to come to an agreement in terms of labor wages, it is possible to negotiate other conditions, such as benefits.

As globalization makes firms become less dependent on U.S. labor, the nature of the labor-management relationship changes. From a game theory perspective, firms have less incentive to cooperate as the ability to send production off-shore gives management a stronger position at the bargaining table.

A return to the prisoner's dilemma helps understand the pressures one faces in negotiations where information is limited and incentives exist to behave opportunistically. Game theory is, in fact, a means of rational decision making by both sides when information is incomplete.

Competitive Dynamics

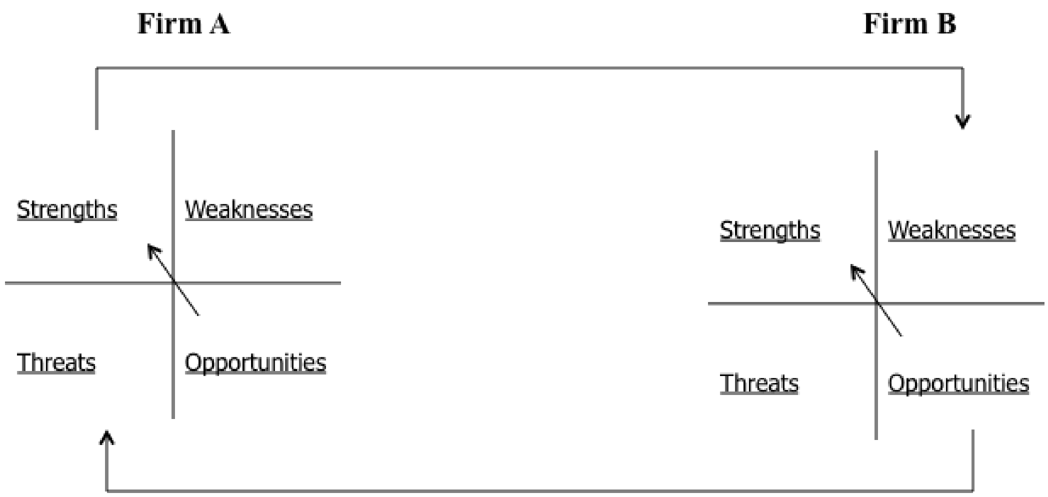
Winning positions can result from a successful stream of strategic decisions over time or they can result from an exploitation of competitive weaknesses. One technique that is utilized to understand a firm's position with respect to competition is SWOT analysis.

SWOT Analysis

SWOT refers to strengths, weaknesses, opportunities, and threats. As shown in Figure 5.1, firms attempt to utilize strengths to capitalize on competitors' weaknesses and build opportunities into strengths.

Figure 5.1:

Decision Making Utilizing SWOT Analysis



Strengths

Strengths refer to capabilities that give the firm an advantage in meeting the needs of its target markets. An analysis of company strengths should be customer focused because strengths are meaningful only when they assist the firm in meeting customer needs. Pfizer's strength in research and development resulted in the creation and release of Lipitor. Lipitor is a cholesterol-reducing drug that has become the largest selling pharmaceutical drug in history[9]. Toyota's strength in lean manufacturing helps to maintain its leadership position in the automotive industry.

Weaknesses

Weaknesses refer to any limitations that a company faces in developing or implementing a strategy. Weaknesses should also be examined from a customer perspective because customers often perceive weaknesses that a company cannot see. Apple's operating system became a weakness when the computer industry went to a Windows standard. Until recently, McDonald's faced a weakness in that the majority of its menu items contain high levels of fat. Today's society is focusing on more healthy eating alternatives.

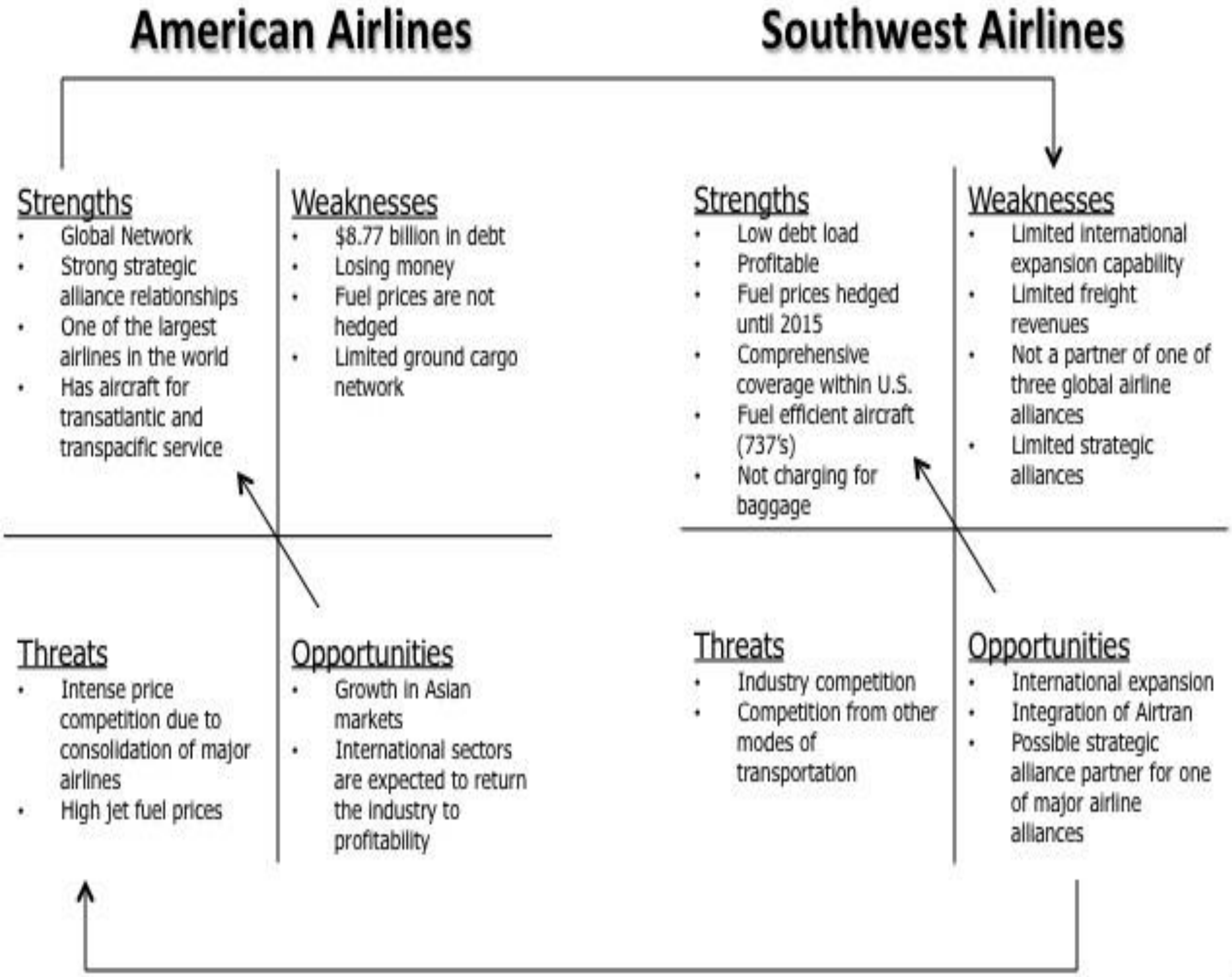
Opportunities

Opportunities refer to favorable conditions in the environment that could produce rewards for the organization if acted on properly. Caterpillar's capabilities in heavy moving equipment lead to it establishing a leadership position in the reconstruction of Iraq. Dell's strategy of selling direct to consumers shortened its distribution cycle and reduced costs.

Threats

Threats refer to conditions or barriers that may prevent the firm from reaching its objectives. For instance, Barnes & Noble's launching of a website to sell books represented a threat to Amazon.com. New regulations may be threats. Many emerging markets (e.g. India, Brazil) are privatizing many industries. This action can lead to new entrants establishing significant positions within these markets. In many cases, the firms that are entering a deregulated market may have had more experience being successful in deregulated industries. As such, these firms pose significant threats to incumbent firms. A firm's strategy should determine how threats could be minimized or eliminated. The threat of Johnson and Johnson losing market share as a result of the cyanide poisoning of Tylenol capsules in the 1980's posed a significant threat. Johnson and Johnson responded to the threat by introducing safety seals; these seals are now industry standards. A SWOT analysis of two U.S. airlines will now be discussed.

Figure 5.2
SWOT Analysis of American and Southwest Airlines (2010)



SWOT Analysis of American Airlines vs. Southwest Airlines (2010)

Figure 5.2 depicts a SWOT analysis of American Airlines and Southwest Airlines as of 2010. American Airlines was one of the founding members of the OneWorld alliances. These global airline strategic alliances provided global coverage to its members. Through its membership the OneWorld network it has total global coverage. On the other hand, Southwest is not a partner of any of the three global airline alliances which limits its coverage to North America. American's debt load is $8.77 billion. In 2010, American Airlines had revenues of $22.17 billion and lost $471 million. American has been losing money for several years, this airline has been too highly leveraged. It has problems from a cash flow perspective. Its high debt load limits its expansion capacity. Southwest Airlines has minimal debt and has been profitable, every year, since the industry was deregulated in 1978. Southwest generated $12.1 billion in revenues and

$459 million in net income in 2010. In addition, Southwest is exploiting American new baggage charges through its advertising.

Southwest has a fleet composed of all 737 aircraft. These aircrafts are very fuel efficient. In addition, Southwest has fuel prices hedged until 2015. American's has one of the largest aircraft fleet of all airlines. However, some of these models (e.g. 747) are not fuel efficient. In addition, American does not have jet fuel prices hedged. During the current time period (2010, 2011) jet fuel prices have skyrocketed. These high prices significantly impact American financial statements because jet fuel is a major cost factor for any airline. Southwest can compete more favorably because of its lower fuel costs.

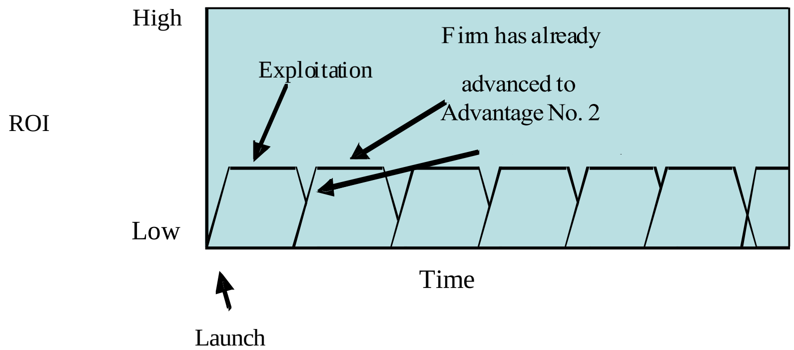
American has a small portion of the revenues (less than 5 percent which are generated from its air cargo operations). This business is more profitable than its commercial passenger revenues. Since many of Southwest flights are less than 500 miles, Southwest faces more significant competition from other modes (e.g. cars) than does American.

Pacific Rim markets are expected to grow significantly over the next few years. American has transpacific and transatlantic capabilities which could positively impact American's bottom line. On the other hand, Southwest's aircraft does not have transatlantic or transpacific capabilities.

Competitive dynamics over time

The achievement of competitive advantage over time will be discussed within the pharmaceutical industry. Firms launch a product (e.g., a new drug) that has been developed through product R&D and then exploit it for as long as possible while the product is shielded from competition. Within the pharmaceutical industry, firms launch new products and these products are protected for seventeen years by patents. Eventually, competitors respond to the action with a counterattack. Within the pharmaceutical industry, this counterattack commonly occurs as patents expire. This creates the need for another product launch by the initial firm to maintain its advantage. Figure 4.6 illustrates this process over time.

Figure 5.3
Achieving Competitive Advantage Over Time



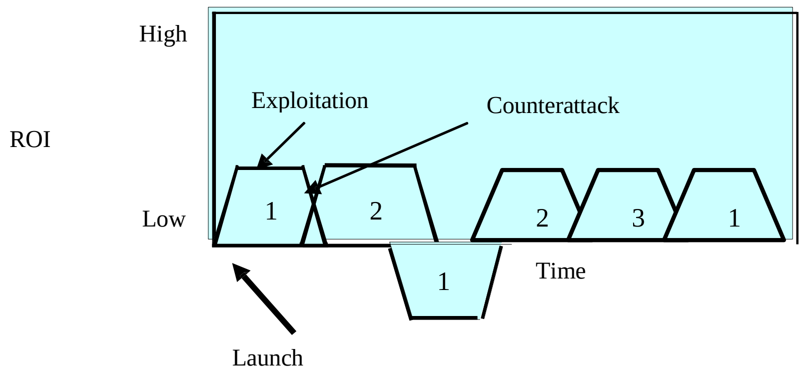
Source: Adapted with permission of the Academy of Management Executive by I. MacMillan from *Controlling competitive dynamics by taking strategic initiatives*, 112. 1988

As patents are about to expire, competition enters from generic drug firms. The brand name drug firm would then launch a second product that would be protected by a second seventeen years of patent protection. As this sequence is repeated over time, firms can build a sustainable advantage based upon a series of temporary advantages.

The above scenario assumes that the initial firm continues to make a series of successful products sequentially. Most of the time, firms make both good and bad decisions. In addition, Figure 5.3 assumes that the sustaining of advantages occurs for exactly the time period. While this may be true of the pharmaceutical industry, which have specific time parameters (e.g. patents last for exactly the same time period), this assumption is not true for many other industries.

In actuality, a firm's ability to sustain competitive advantage may be a function of successful new products which are initiated by competitors for different time periods. (e.g. iPad) The actual evolution of industries may be more similar to Figure 5.4.

Figure 5.4
Competitive Dynamics Over Time



Firm 1 develops an initial advantage. Firm 2 develops a similar product which is viewed as more acceptable to the customer base. This is why it has a longer period of maintaining high ROI. Firm 1 then tries to develop another product but this product fails in the market place. Firm 2 learns from Firm 1 and then offers a product which is well received by the customer base. Therefore, it has a longer period of sustainable ROI. Firm 3 then enters the industry with a product which appears to be successful. This process then continues over time.

A scenario within an industry is more likely to look as depicted in the following table (Table 5.2) taken from Capstone Stimulation for Years 1 through 3.

Table 5.2
Performance on ROE (Percentage Change)

Team	Year 1	Year 2	Year 3
Andrews	(5.7)	(10.1)	(14.7)
Baldwin	4.3	6.7	9.1
Chester	(3.3)	(4.6)	1.2
Digby	(2.3)	3.1	(4.6)
Erie	6.1	(2.9)	(6.8)
Ferris	(7.2)	(1.4)	5.9

Assume that the teams in the simulation industry achieved the results in Table 5.1. Andrews does not appear to have a business level strategy because returns are steadily declining. This competitor may not have a clear understanding of key buying criteria. This is a weakness that your firm may be able to exploit.

Baldwin does appear to have a business level strategy that is working on a year-to-year basis. What is Baldwin's business year strategy on a segment-by-segment basis? Will Baldwin be able to sustain this strategy over time? The key to strategy is to have a long-term strategy and properly execute the strategy over time. Does Baldwin appear to have a viable long-term strategy? How can your firm successfully position against Baldwin for long-term success? Examine the statement of cash flows to ascertain if Baldwin is investing in plant improvements. If not, what does this tell your firm? How should your firm position itself in the short and long term with respect to Team Baldwin?

Team Chester may not be in as unfavorable a position as it appears for the long term. This team may have heavily invested in plant improvements, automation, or TQM initiatives. These benefits may be realized in subsequent years. Refer to the cash flows statement of the simulation for changes in plant improvements, the production analysis for changes in automation, and the TQM summary for investments in quality improvements. It is quite possible that Team Chester will accrue higher benefits in subsequent years.

It would appear as if Team Digby does not have a short-term business level strategy. This team may have accumulated inventory-carrying costs during Year 1 and Year 3. How are this team's products positioned on a segment-by-segment basis on key buying criteria? This may be a team that your team can take market share from. Develop a short-term strategy to capitalize upon this competitor's weaknesses.

Team Erie appeared to have a solid year 1 and has since had difficulty. What changed for Team Erie? Why were they successful in year 1 and not subsequent years? Did other firms develop strategic changes to capitalize upon Team Erie? If so, what team and what was the action? Erie's strategy may not have enough flexibility to respond to changing market conditions or to changes in other firm's strategy that are aimed at exploiting their weaknesses.

Similar to team Chester, Ferris may be a team that invested heavily in year 1 (check the cash flow statement, production analysis, and TQM summary). It also appears as if these investments are beginning to pay rewards. How is this competitor positioned on key buying criteria on a segment-by-segment basis? What can your firm do to neutralize Ferris? What is Ferris' generic business strategy on a segment-by-segment basis? Where are their weaknesses? How can these weaknesses be exploited?

While each team should develop a long-term business level strategy for each segment, that strategy must be flexible enough to capitalize upon competitor's weakness over time. Competitive dynamics requires that firms have enough flexibility to respond to competitors' threats. The key to competitor analysis is to evaluate each competitor on a segment-by-segment basis. How well is each competitor meeting the key buying criteria? What is each firm's business level strategy on a segment-by-segment basis? With this information your firm should be able to develop a strategy to gain and sustain competitiveness.

Discussion Questions

1. Does game theory make firms less dependent on labor? Briefly explain.
2. How has game theory been utilized in business? Briefly explain.
3. What concept is game theory based upon? Briefly explain.
4. Explain why and when SWOT analysis needs to be performed.
5. Explain sustainable competitive advantage. How is this advantage achieved in the Capstone simulation?
6. Explain the difference between competitive dynamics and business level strategy. Explain why each is important.
7. Explain how one of the teams in your industry has been successful from a competitive dynamics perspective. Explain why one team have not been successful. What would you recommend for this unsuccessful team? Explain.

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Eli Lilly Mini Case

Competitive dynamics can involve more than two firms with an industry. Eli Lilly is a major manufacturer of branded pharmaceutical drugs. 2014 was a difficult time for this firm. Refer to Table 1.

Table 1
Financial Results Comparison (Eli Lilly)

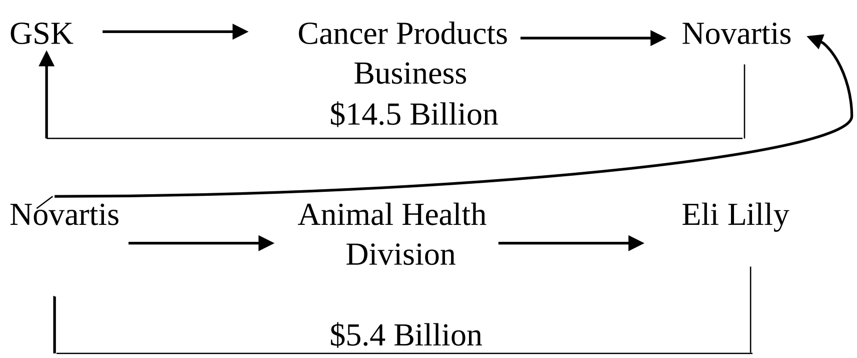
	Year		**%**
	2014	2013	Change
Total Revenue ($ billions)	$19,615.6	$23,113.1	(15)%
Net Income ($ billions)	$2,390.5	$4,684.8	(49)%
EPS – Reported	$2.23	$4.32	(48)%

Eli Lilly was down 15 percent in revenue, 49 percent in net income, and 48 percent in EPS from 2013 to 2014.

Revenue decrease was comprised of 12 percent due to volume, 2 percent due to the unfavorable impact of foreign exchange rate, and 1 percent due to lower prices. Total revenue in the U.S. decreased 29 percent to $9.134 billion due to lower demand for Cymbalta and Evista following patent expirations. Sales of Cymbalta decreased by 68 percent and Evista experienced a decrease in revenues of 66 percent.

In order to reverse this trend, Eli Lilly became involved in a three-way restructuring within the industry. Figure 1 shows what happened in 2014. Glaxosmithkline (GSK) sold its cancer products to Novartis for $14.5 billion in 2014. Novartis then sold its animal health division to Eli Lilly for $5.4 billion. Novartis is becoming much more focused on cancer products. This why it acquired GSK's cancer segment. To help fund this venture it (Novartis) sold its animal health division to Eli Lilly.

Figure 1
Restructuring in the Pharmaceutical Industry



Chapter 6

Analysis of Markets and Positioning

Learning and Assessment Goals

1. Understand the various sales forecasting techniques and when to employ each.

2. Understand how markets can be segmented.

3. Understand the relationship between market segmentation, key buying criteria, and sales forecasting.

4. Understand the trade-offs (e.g. inventory carrying costs) that are made as a result of inaccurate sales forecasting. Understand how to improve sales forecasting.

5. Develop the ability to achieve successful competitive advantage in multiple market segments.

Marketing is based upon the fundamental concept of exchange. A seller engages in a relationship with a customer by providing a good or service in exchange for payment, which is usually money. The primary focus of marketing is outside the firm. A seller must provide a good or service to a customer that meets the customer's needs at the right place, at the right price, in the right form, in the right quantity, and at the right time. If one or more of these conditions is not met, the exchange will not occur.

Market Segmentation

In order for firms to meet all of the above criteria, they develop a marketing mix, which consists of an integration of product, price, promotion, and distribution that is targeted toward identifiable market segments. Market segments consist of consumers who have very similar needs.

A market segment is a group of people who, as individuals or as organizations, have needs for products in a product class and have the ability, willingness, and authority to purchase such products[1]. In general use, the term market sometimes refers to the total population, or mass market, that buys products. However, our definition is more specific; it refers to persons seeking products in a specific product category. A market segment is defined by key success factors. Remember from Chapter 4, these are factors that are important to customers and upon which customers make buying decisions.

Within an industry, key success factors can be used to define segments. For example, the key success factors within the automotive industry are significantly different than those within the telecommunications industry. Key success factors, referred to as customer buying criteria in the Capstone Simulation, form distinct market segments. The simulation has five market segments: low end, traditional, high end, performance, and size. While the factors are the same for each segment, their importance varies on a segment-by-segment basis. For example, price is the most important key buying criteria in the low end, while positioning is the most important in the high end.

Because customers place different importance on key buying criteria or have different key buying criteria, the firm must develop a separate marketing mix for each segment. A firm generates value by providing a better marketing mix than its competitors. [2] An example is illustrated in Figure 6.1.

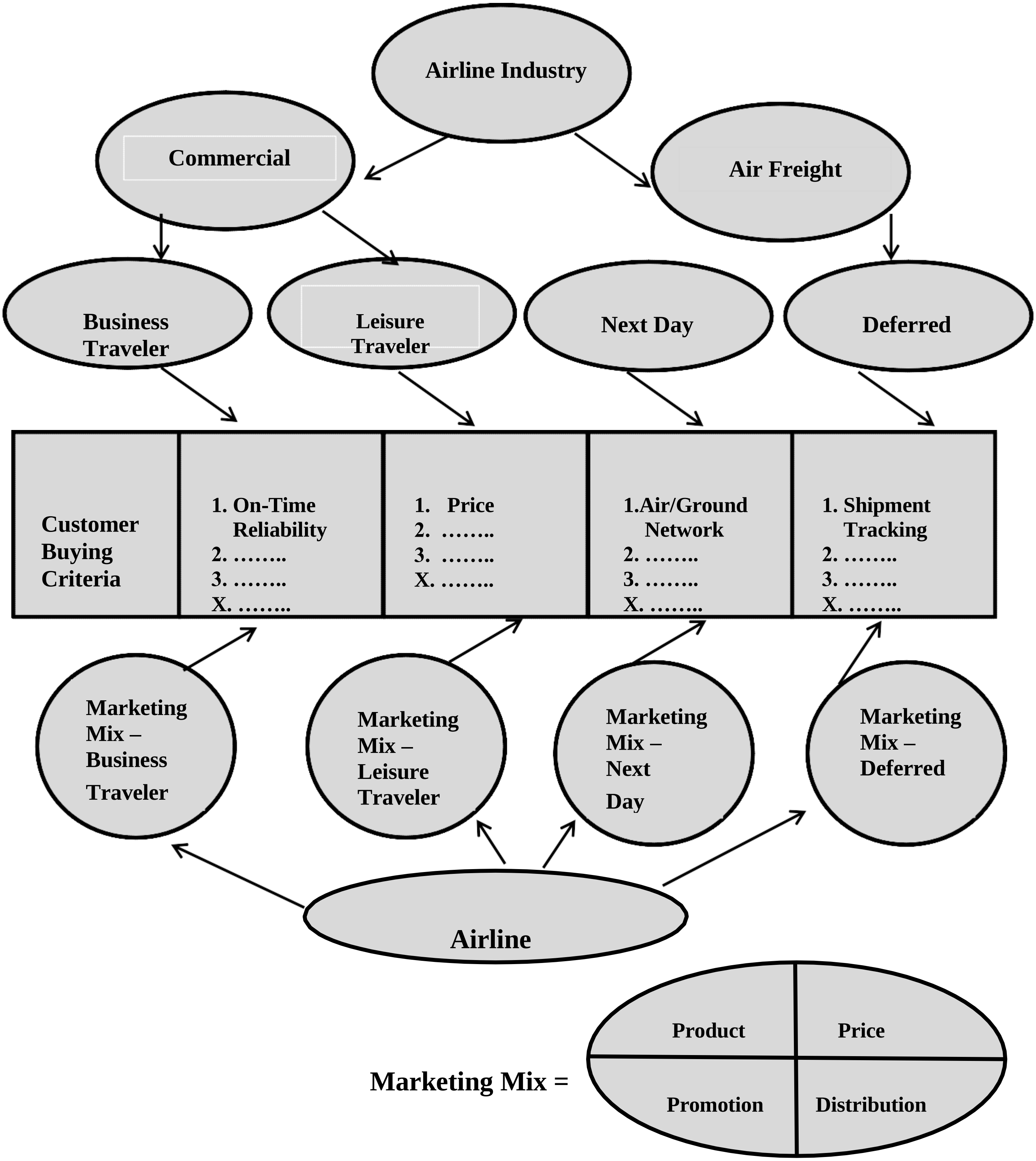
Market Segmentation and the Airline Industry

The airline industry can be segmented into commercial and airfreight segments.[3]The commercial segment can be further segmented into business and leisure travelers. The airfreight segment can be further segmented into next day freight and deferred freight. Deferred freight has a service requirement beyond next day. Each of these segments has different customer buying criteria, or each segment places different importance on the same buying criteria.

For example, the most important criterion to the business traveler is on-time reliability. To the leisure traveler the most important criterion is price. For the next day air freight segment, the most important criterion is an integrated air/ground hub and

Figure 6.1

Market Segmentation of the Airline Industry



spoke operating network. For the deferred airfreight market, the most important criterion is shipment tracking. While some criteria, such as price, are common to all segments, each segment needs to be treated as a separate market. To properly service a segment, the firm must know the specific buying criteria in order of importance. Members of each segment view the same buying criteria in the same order of importance. The goal of the firm is to develop a series of separate marketing mixes to meet the needs of distinct customer segments superior to competitors.

Customer buying criteria change over time. The telecommunications industry has undergone significant change since it was deregulated in 1984. The focus of the telephone industry in 1984 was to provide point-to-point communication. This focus was greatly expanded during the 1990's with heavy influence from Internet variables such as; packet switching, Internet Protocol (IP), and the World Wide Web.[4] These newly created influences served as a launch pad for the industry's metamorphosis from "the Telecoms Industry to the Infocommunications Industry".[5] In 2012, with the explosion of smartphones, mobile operating systems (such as Apple's iOS) and voice command personal assistant applications such as Apple's Siri[6], the infocommunication industry is rapidly creating the way we communicate.

As such, it is important for the firm to know the new set of key buying criteria at a point in time and have enough flexibility to change the capabilities of the firm to meet new key buying criteria as they evolve over time. Thus, developing relationships with customers over time is of critical importance.

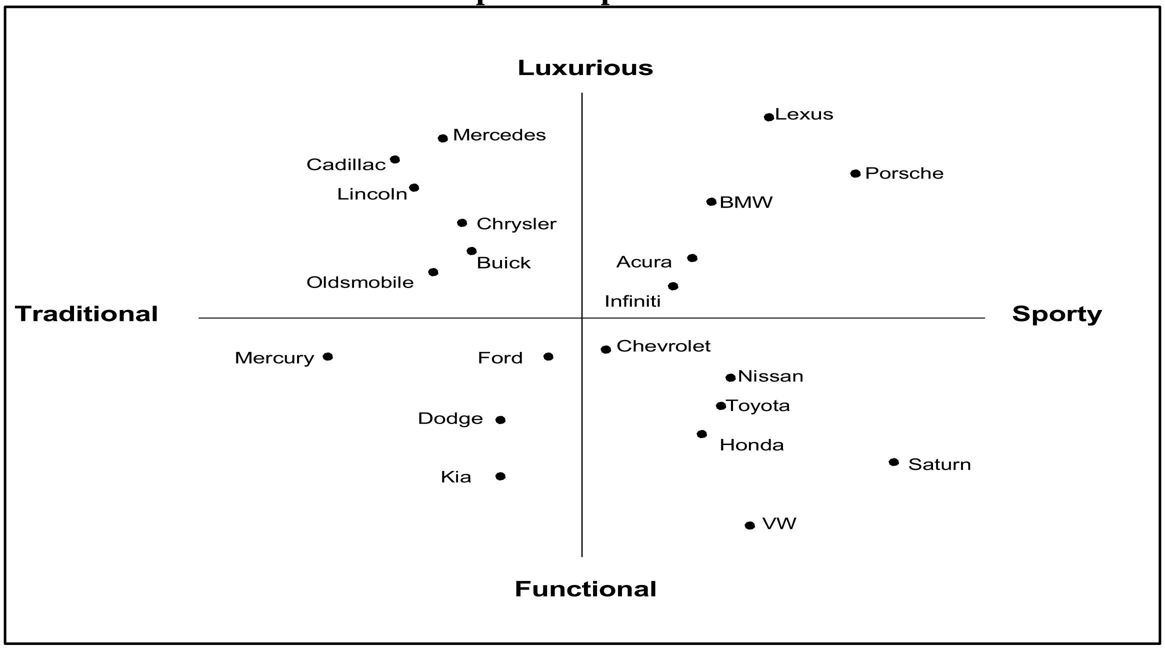
Since the sales staff has direct customer contact, the firm needs to develop a communication infrastructure for moving information on customer needs and expectations from sales employees to senior management. With this information the firm can determine the trade-offs its customers are willing to make.

Not only must the firm be knowledgeable of the changing key success factors on a segment-by-segment basis, the firm must be able to forecast demand on a segment-by-segment basis. Several methods exist for forecasting.

Product Positioning

The key to marketing is to develop products that are better than competitors on dimensions that are important to customers. Figure 6.2 provides a depiction of the global automobile industry. We call this depiction a perceptual map.

Figure 6.2
Perceptual Map for Autos



In this perceptual map, auto brands are compared on two key buying criteria (price and traditional versus sporty). This map shows some interesting facts.

If you will remember from the G.M. case, it eliminated the Oldsmobile line. The perceptual map shows that Oldsmobile and Buick compete for the same customers: customers that desire a reasonable priced car which has traditional product features (e.g., GPS positioning).

Competing for the same customer base can take sales away from one or both brands. As such, G.M. decided to eliminate the Oldsmobile line and keep the Buick line.

In addition, there does not appear to be a significant market for autos which are traditional and have functional features.

There are a number of brands which are close to the center of the perceptual map. This is a sign of a mature industry. Many firms compete for the exact same customer base: moderately priced cars which do not differentiate in terms of traditional vs. sporty criteria.

Since this perceptual map has the capability to evaluate only two key buying criteria, additional criteria must be considered. Currently (2011) the price of oil is at all time highs. As such, the price of gasoline is quite high. This criteria affects all makes of cars. Developing new sources of propulsion (e.g. electric) may provide the first mover with a significant advantage. In addition, electric propulsion provides sustainability benefits which gasoline does not. In addition, electricity may eventually be cheaper than gasoline.

Further, it would appear that Acura and Infiniti compete for the same general customers. This is a much more competitive section of the segment that the customers who buy Porsche (very high price, very sporty). The task for the manufacturers of Acura and Infiniti is to develop a point of differentiation from each other to provide a competitive advantage.

Sales Forecasting

Sales Forecasting Methods

At times, a company may forecast sales chiefly on the basis of **executive judgment**. Executive judgment may work reasonably well when product demand is relatively stable and the management team has many years of industry experience. A disadvantage of executive judgment is that the views of customers are not obtained. As key success factors in the industry change, executives must be aware of these changes. It is important for executives to continuously communicate with the sales force. The sales force has direct customer contact and may be more knowledgeable than senior management with respect to changing conditions.

Naïve methods are another type of forecasting method. Forecasts are developed based on last year's sales and growth rate. Naïve methods are best utilized when industries are in their maturity stage. During the maturity stage of an industry's life cycle, entry of firms outside the industry is minimal because all market segments have been addressed. The tobacco industry would fall into these general parameters. Growth rates in these industries tend to be relatively stable and do not change significantly from year to year. In addition, market share within these industries tends not to change much over time because of the stage (maturity) of industry evolution.

The utilization of multiple years of sales data can be very helpful when attempting to forecast future sales. One technique that uses multiple years of sales data is **exponential smoothing.** Exponential smoothing consists of projecting the next period's sales by combining an average of past sales and most recent sales giving more weight to the latter. A simple exponential smoothing method requires less data than more advanced techniques but does not adjust for seasonality. More sophisticated methods (e.g., Winter's smoothing) are needed if seasonality is present.

The **Delphi technique** is a method of making forecasts based on expert opinion.[7] The Delphi technique is gradually becoming more important for predicting sales.[8] Many large corporations use this technique for long-range forecasting. This technique is based upon the judgment of "experts."

The Delphi approach was developed to deal with situations where experts are in remote locations. The basic approach involves asking each individual to provide forecasts. In round one, the experts are surveyed via questionnaire, and the results are then summarized. In the second round, the respondents are given the same questionnaire, along with a summary of the results from the first round. Results are once again compiled and third round is conducted. This process of repeating rounds can be continued until there is agreement between the experts.

With **time series analysis**, the forecaster uses the firm's historical sales data to attempt to discover a pattern or patterns in the firm's sales over time. If a pattern is found, it can be used to forecast sales. This forecasting method assumes that past sales patterns will continue in the future. In an industry where entry barriers are low, firms may enter more easily, as opposed to industries where entry barriers are high. With the entry and exit of firms, the pattern of historical sales may not be an accurate predictor of future sales.

In a time series analysis, a forecaster usually performs several types of analyses: trend, seasonal, and random factor. Trend analysis focuses on annual sales data spanning many years to determine if a general sales pattern can be observed. Seasonal analysis is performed to ascertain if sales follow a pattern within a given year. For example, around Christmas consumer goods have significantly higher sales than other times throughout the year. With random factor analysis, the forecaster attempts to determine the impact of environmental conditions on sales that are beyond the firm's control. Hurricane Katrina would be an example of an environmental factor that had a significant impact on the price of gas. After performing each of these analyses, the forecaster combines the results to develop the sales forecast.

Like time series analysis**, regression analysis** requires the use of historical sales data. In regression analysis, the forecaster seeks to find a relationship between past sales (the dependent variable) and one or more independent variables, such as population, per capita income, or gross domestic product. Simple regression analysis uses one independent variable, whereas multiple regression analysis includes two or more independent variables. An accurate forecast depends on a specific relationship between the dependent and independent variables. Regression analysis is not recommended when faced with changing environmental conditions. An increase in unemployment, recession, inflation, and advances in technology may change the relationship between the dependent and independent variables over time. Changing industry conditions, such as the entry of a large competitor (e.g. Microsoft entering the gaming industry) may also change the relationship between dependent and independent variables. Because of changing conditions, it is important to remember that forecasting sales should not be a specific value. By developing a range, the firm can build in flexibility to accommodate broad sets of conditions (e.g. firms exiting a specific segment).

Scenario analysis is a tool used to generate strategic alternatives based on varying assumptions about the future. A scenario is a possible set of environmental circumstances concerning what the environment may look like in the future. It depicts potential actions and events in a likely order of occurrence, beginning with a set of conditions that describe the current situation. Scenario analysis can factor in predicted competitive actions.

Sales Forecasting and Capstone Simulation

Table 6.1 summarizes the size market segment information. Section a of Table 6.1 identifies size and growth of the segment and the customer buying criteria. Within the segment, positioning and age dominate the buying criteria. Re-positioning of existing products is quite important because positioning is 43 percent of the customer buying criteria. An additional benefit of repositioning is age is cut in half. Section a also identifies the segment demand (4596 units) and the growth rate (18.3 percent) for the current year. The actual units sold met the segment demand for this year. If the competitors had not met the demand, actual units sold would be less than the total industry demand (4596 units).

Section b of Table 6.1 summarizes the activity that has taken place within the segment for the year. No products with significant market share sold out. Several products were not positioned well (Egg, Buddy) and incurred significant inventory carrying costs. This section of the table is very helpful because it provides a competitive analysis on a product-by-product basis. This data is useful in decision-making for the next round.

Section c is the production schedule. This portion of the table identifies the production capacity on a product-by-product basis. A product's production capacity needs to be adjusted based upon inventory that was not sold from this year.

The three sections of this table allow for an analysis of decisions that need to be made for the next year within the size segment from an R&D, marketing, and production perspective. Let us begin with an estimation of sales.

The technique utilized to forecast segment demand in the Capstone Simulation is a naïve method. The sales forecast for the segment is the segment demand (4596) times the growth rate (18.3 percent). Thus, the segment demand for the next year is 5437 units. Sales forecasting of firm demand is much more complex. If each competitor offers exactly the same product, each competitor would be expected to receive 1/7 of the segment demand (777 units). All teams except Baldwin and Ferris have one product in the segment; Baldwin has two products in the segment and Ferris has no products in the segment.

Forecasting production capacity within this segment for each competitor is important. Based upon the production schedule (Section c), there is a total capacity of 3241 units generated by first shift production for the next round**.** In addition, the production summary provides ending inventory levels. The inventory remaining at the end of the year is 1289 units. This represents a total capacity of 4530 (3241 + 1289) units for the next round. If all firms operate at the capacity levels they are at now (Section c) and sell the remaining inventory, there will be 907 (5437 – 4530) units of unmet demand. The production capacity for next year (section c) will now be discussed.

Table 6.1
Size Market Segment Analysis
Section a

Size Statistics		
Total Industry Unit Demand		4,596
Actual Industry Unit Sales		4,596
Segment % of Total Industry		11.0%
Growth Rates		18.3%
Customer Buying Criteria		
Criteria	*Expectations*	*Importance*
1. Ideal Position	Pfmn 7.5 Size 5.6	43%
2. Age	Ideal Age = 1.5	29%
3. Reliability	MTBF 16000-21000	19%
4. Price	$22.50 – 32.50	9%

Section b
Products in Size Segment
Top Products in Segment

Name	Market Share	Revision Date	Inve-ntory Level	Pfmn Cord	Size Cord	List Price	MTBF	Age Dec. 31	Promo Budget	Sales Budget	Customer Awareness	Dec. Customer Survey
Cure	21%	26-Sep-14	66	7.5	5.4	$32.90	19000	1.3	$1,100	$1,441	66%	41
Egg	19%	21-Apr-14	341	6.7	6.8	$32.50	18500	2.1	$800	$3,650	87%	28
Agape	18%	26-May-14	182	7.5	5.6	$32.50	19000	2.4	$1,300	$1,904	90%	51
Buddy	14%	12-Apr-13	511	6.1	6.8	$31.99	19000	2.5	$1,200	$591	89%	14
Dune	13%	5-Nov-14	189	7.3	5.6	$32.50	20000	1.5	$480	$1,021	65%	55
Best	9%	28-Jun-13	YES	6.8	6.6	$32.49	24000	1.5	$1,200	$521	39%	26
Ditty	6%	9-June-14	YES	7.5	5.6	$32.50	20000	1.1	$1,021	$480	36%	44

Section c Size Production Schedule				
Firm	**Sales (Units)**	**Inventory (Units)**	**Capacity Next Round (Units)**	**Plant Utilization**
Cure	943	66	500	149
Egg	863	341	341	194
Agape	839	182	600	149
Buddy	654	511	600	184
Dune	603	189	600	132
Best	396	Sold out	400	99
Dity	297	Sold out	200	149
Total		**1289**	**3241**	

Cure is the best-positioned product in the segment (inventory level of 66) and 21 percent market share (section c). Its positioning coordinates (performance at 7.5 and size at 5.4) (section a) are very close to the ideal position (performance at 7.5 and size at 5.6) (section a). Cure needs to be R & D'ed to position at the ideal coordinates for the next round. This action will also cut Cure's age in half. This is significant because positioning is 43 percent of the buying criteria and age is 29 percent (section a). For the current round Cure's revision date is September 26. This is too late in the year and needs to come out earlier next year. One way of achieving an earlier revision date is to allocate funds to the TQM initiatives, which reduce cycle time.

Egg has significant inventory. It sold 863 units and had an inventory of 341 units (section c). In many cases, this is a result of poor product positioning. Positioning is the most important customer buying criteria, which accounts for 43 percent of the customer's decision. Egg is relatively poorly positioned (performance – 6.7, size – 6.8) when compared to its primary competitors: in this case, Cure and Agape (section c). Egg's age (2.1 years) is much higher than Cure (1.3 years) with the ideal age at 1.5 years. Egg is running at 94 percent overtime (section c). In essence, Egg is running overtime on its production lines to produce product, which is inferior to competitors. In addition, Egg's promotion budget is $800, which may lead to the fact that its December customer survey is 28. Cure and Agape are both significantly higher.

Egg's production capacity for next year is 341 units. By selling the 341 in inventory and producing its first shift capacity of 341 units, Egg can significantly reduce its inventory. Also, Egg needs to spend R&D to get closer to the ideal position for next year.

Agape has made a commitment to be a major player in the industry. It sold 839 units and inventoried 182 units with production capacity of 600 units for next year. Agape plans to stay as a major product in this segment. No firm has greater production capacity planned for this segment. Buddy and Dune also have 600 units of capacity next round. From a positioning perspective, Agape is right on the ideal point (Table 6.1 section a & b). It must R&D this product to remain on the ideal point for the next round and cut its age in half. Its age (2.4 years) was a little high for this segment this year.

Buddy is in a difficult situation because it has made a significant commitment to this segment (600 units of capacity for next round, section c) but has 511 units in inventory (section c). This is the highest level of inventory experienced by any product in the segment. Buddy has very poor product positioning. Its performance coordinate is 6.1 and its size coordinate is 6.8 (section b). The ideal position is performance at 7.5 and size at 5.6.

Buddy is going to have to spend a significant amount of R&D to reposition the product closer to the ideal position. Due to the extensive amount of R&D needed, Buddy may have a late revision date. Buddy will have trouble selling product until this revision date is reached. As such, investments in TQM to reduce R&D cycle time would be required. In addition, Buddy is running at 84 percent overtime. In essence, it is paying overtime to inventory product. Buddy may be better served to exit the segment and use the funds for more profitable opportunities.

Dune is in a situation that is not optimal either. For the year, Dune sold 603 units and inventoried 189 units. Dune is very near the optimal position coordinates (7.3 for performance and 5.6 for size). However, this positioning was not obtained until November 5 (section b). Virtually Dune’s entire inventory was accumulated prior to November 4 (section b). Dune also is at the optimal age of 1.5. Dune and Cure have the strongest products in the segment.

Dune has 600 units of capacity next year. It should sell as many products (1200 units) as it can by running a second shift at 100 percent. Dune should be able to sell all 1200 units at the top of the price range ($32.00 next round) and its entire inventory. Dune should consider adding a second shift based upon segment growth rate of 18.3 percent. It also needs to be pointed out that it has the highest December customer survey (55) (section b).

Best needs to be discussed. Best only has a 9 percent market share. However, it is not positioned well (performance 6.8, size 6.6) (section b). In addition, Best has an age of 1.5, which is the ideal age for the segment (section a). Its production capacity for next year is 400 units. If Best is to grow its market share, it will need to invest in R&D to reposition closer to the ideal position. In addition, its customer awareness is 39 percent and its December customer survey is 26 (section b). Its investment in sales budget ($521 – section b) needs to be increased significantly.

Best’s plant utilization is 99 percent: as such, it is not incurring overtime. All other products are incurring overtime in this segment. Best should maximize the utilization of overtime. This action may give it a cost advantage within the segment. Best is at the age of 1.5 years, Best has an advantage over all other products except Dune (Dune is also at the ideal age (1.5 years) (section b).

Ditty is a very strong product in this segment. It is positioned at the ideal position (performance 7.5, size 5.6) and its age is at 1.1. Ditty needs to run its production line at 100 percent overtime. Its December customer survey is 44: this is second highest within the segment. Significant increases in the sales budget are needed. It is currently allocating only $480 to its promotion budget. Table 6.2 provides an assessment of each product in this segment and also provides recommendations on a product-by-product basis.

One issue that needs to be discussed is the relationship between increasing plant capacity and overtime. The trade-off is as follows: overtime costs a 50 percent wage premium. However, running a second shift may be more profitable. If the teams only run first shift, it already has paid all of the period costs – things like depreciation, R&D, promotion and sales budgets. But if period costs are already paid for, second shift only has to pay for the 50% premium on the labor. In high growth markets, firms may need to run at 200 percent capacity and add plant.

Table 6.2 Product Analysis Summary		
Product	**Assessment**	**Recommendations**
Cure	• Good positioning • Minimal inventory • Late revision date (September) • Highest market share in segment • 1st shift capacity is 500 units	• R&D to remain at, or close to, sweet spot for next year • R&D will cut age to 1.3 (optimal is 1.5) • Invest in TQM to reduce R&D cycle time • Increase December customer survey • Add capacity to increase market share • Run production line at 200 percent • Increase MTBF to 21,000
Egg	• Poorly positioned relative to other competitors (e.g. Cure) • Age is too high (2.1 years): ideal age is 1.5 years	• Produce at capacity (341 units) for next years • Production line needs to be producing at 100 capacity • Promotion budget needs to be increased • December customer survey needs to increase • If product line profitability is negative, consider eliminating product • Increase MTBF to 21,000
Agape	• Must remain in segment (600 units capacity) next year • Age must be reduced • Production capacity needs to be increased because Ferris is out of segment and other competitors are not well positioned	• R&D to remain at, or close to, sweet spot for next year • R&D will cut age to 2.4 • Invest heavily in TQM initiatives to reduce R&D cycle time • Continue to invest heavily in promotion and sales budget • Increase MTBF to 21,000
Buddy	• Not well positioned (43 percent of customer buying criteria) • Age is too old (2.5 years) • Running at 84 percent overtime and producing significant inventory	• Buddy should exit this segment and use funds to better position itself in other markets
Dune	• Significant inventory • Revision date is late (November) in year • Once revision date is reached, Dune will be a strong product • Promotion budget needs to be increased significantly	• R&D to move closer to ideal position • Invest heavily in TQM to reduce R&D cycle time and keep product at optimal age (1.5 years) • Add capacity and produce at 100 percent overtime • Increasing MTBF to 21,000 would be advised
Best	• Not incurring overtime • MBTF at 24,000, which is 3,000 over range • Best is at optimal age (1.5 years) • December customer survey is 26	• Utilize overtime • MTBF needs to be reduced to 21,000 • R&D product to move closer to ideal positioning and to maintain ideal age (1.5 years) • Significantly increase sales budget
Ditty	• Incurring no inventory • Additional market shares can be taken once R&D has occurred (June) • Age at 1.1 years is positive	• R&D to maintain optimal positioning and 1.1 age • Invest in TQM to decrease R&D cycle time • Utilize a second shift • Run production line at 100 percent overtime • Increase MTBF to 21,000 • Increase sales budget to parity with other competition

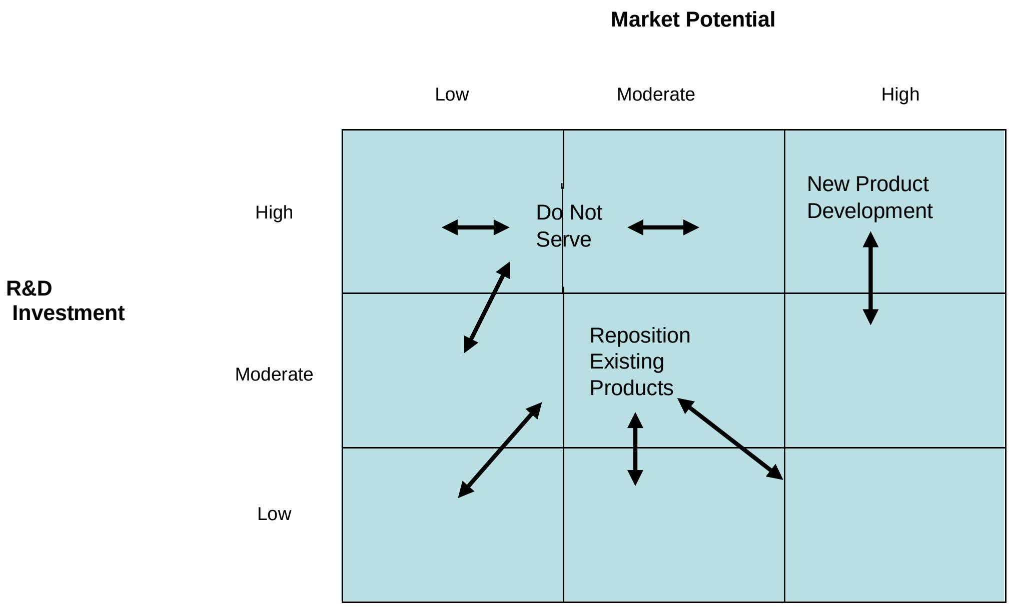
Marketing Mix Variables

As key buying criteria change, the firm must make changes to its marketing mix. As discussed earlier, a marketing mix consists of an integration of product, price, promotion, and distribution.

Product Variable

A product is anything tangible or intangible which is obtained as a result of an exchange relationship between buyer and seller. Products must meet the key buying criteria of each segment. Within the Capstone Simulation, each firm must make decisions as to whether to revise existing products through increased spending on R&D or engage in new product development. Consider the following matrix:

Figure 6.3
Product Decisions



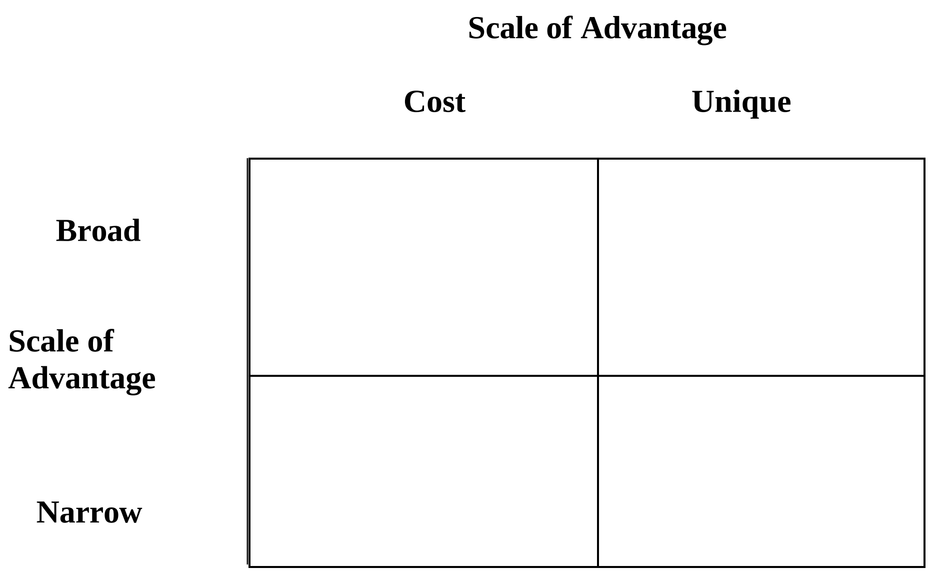
If the market potential for the product is high and if it requires high investment in R&D, it may make sense to engage in new product development. Some competitors will attempt to R&D existing products. However, if the gap between existing products and desired products is significant, developing new products may provide the firm with a competitive advantage. For example, pharmaceutical firms focus upon new products to cure diseases (e.g. AIDS).

For other types of products, where R&D investments are low, it may be more beneficial to R&D existing products. This is also the case if both R&D investments and market potential are moderate. To R&D existing products normally requires a shorter time to market and is less expensive than new product development. If the market potential is high and investment in R&D is low, revising existing products will usually be more beneficial. If the market potential for the product is low or moderate and R&D investment is high, the firm should focus its resources on other products. Also if the market potential is low and the R&D investment is moderate, the firm should not further serve this segment.

Price Variable

The role of price in the marketing mix needs to be discussed. Price is significantly different than all other marketing mix variables. Price is the only variable that generates sales; all other marketing mix variables generate costs. In addition, price is easily changed; as such, it is more flexible than other marketing mix variables. Price must be able to cover variable operating expenses and must be competitively appealing to customers when evaluating alternative products of competitors. The more important price is viewed, as a significant key buying criterion, the greater the focus the firm must place upon it. Price is quite important in commodity-based markets.

Figure 6.4
Generic Business Strategies



For products in the shaded area, price is very important. To remain profitable in these segments, the firm must be a low cost provider. That does not translate into spending less on marketing. If acceptable products are not offered to the customer base, they will not be purchased at any price. In addition, if products are not promoted, the customer may not be aware that products exist. Further, if the distribution network is not fully developed, customers will have no option other than to purchase competitors' products.

If price is a significant key buying criteria and there are several competitors in a given segment, there may be substantial pressure to lower price. What is the lower bound on price: an analysis of the income statements must be conducted. Product line profitability can be utilized to determine the lowest acceptable price. This is especially true if price is expected to be a significant key-buying criterion in the future. Under this scenario, it makes sense to attempt to lower production costs or reallocate resources to higher margin segments.

Promotion Variable

Just as the marketing mix has four principal components, the promotion mix also has four components: **advertising**, **personal selling**, **sales promotion**, and **public relations**.

Advertising is a paid form of nonpersonal communication transmitted through mass media, such as television, radio, the Internet, newspapers, magazines, direct mail, outdoor displays, and signs on mass transit vehicles. Organizations use advertising to reach a variety of audiences ranging from small groups to large populations.

Advertising can be used to build up a long-term image for a product (ex. Coke). It can also efficiently reach geographically dispersed buyers. Certain forms of advertising (TV) require a large budget, whereas other forms (local newspaper) do not.

Personal selling is paid personal communication that attempts to inform customers and persuade them to purchase products in a face-to-face setting. Personal selling is normally utilized for customers who generate a large volume of sales. For example, Boeing had 33 customers who generated 90 percent of its 2010 revenue. As such, Boeing utilizes sales teams for each customer. Personal selling is unique among the promotion elements in that it is the only element that permits real-time customer feedback. This feedback is not confined to a customer's existing products. Personal selling allows sales people to probe customers concerning competitors and competitors' products. Personal selling can also be used to obtain information from customers with respect to future needs. This is why maintaining relationships with customers over time are so critical. Feedback from sales people can be utilized to develop new products that focus upon unmet needs of customers.

Sales promotions are direct inducements to the consumer to make a purchase. More money is spent on sales promotions than any other promotional mix element in the United States. Sales promotion consists of coupons, contests, rebates, and other incentives designed to generate sales. The focus of sales promotion is to generate sales in the near term. Auto dealers offering rebates and 0 percent financing during the fall months are examples of sales promotion. Retail stores offering discounts after Christmas is another example.

Public relations are a broad set of communication efforts used to create and maintain favorable relationships between an organization and its stakeholders. An organization communicates with various stakeholders, both internal and external, and public relations efforts can be directed toward any or all of these. A firm's stakeholders include customers, suppliers, stockholders, the media, educators, potential inventors, government officials, and society in general.

Public relations is a marketing communications function that deals with the public issues encountered by firms across a wide range of situations. An important component of public relations is publicity—news media coverage of events related to a firm's products or activities. Publicity presents both challenges, (as GM learned with its schedule of heavy annual layoffs ending in 2010 and most recently PepsiCo's 2012 announcement of a 3 year plan for global layoffs[9]) and opportunities (e.g. electric cars). News reports about problems, such as those Bridgestone/Firestone had to deal with, represent challenges. Large investments in facilities, which generate jobs or new product discoveries, represent opportunities for positive publicity (e.g. Caterpillar building a new plant in North Carolina in 2011 created many new jobs).

The Capstone Simulation incorporates promotion decisions into the marketing spreadsheet. Promotion expenditures create product awareness. Awareness is critical because the customer base must be aware that products exist. Table 6.3 is a summary of the promotion media that can be targeted to the simulation segments.[10]

Table 6.3 Summary – Promotion Budget					
SEGMENT	**PRINT MEDIA**	**DIRECT MAIL**	**WEBMEDIA**	**EMAIL**	**TRADE SHOWS**
Traditional	Good	Good	Poor	Poor	Fair
Low End	Good	Good	Poor	Poor	Fair
High End	Poor	Fair	Fair	Fair	Good
Performance	Poor	Poor	Good	Good	Fair
Size	Fair	Poor	Good	Good	Poor
Diminishing Returns Beyond	$700,000/ Product	$800,000 Product	$500,000/ Product	$600,000/ Product	$300,000/ Product

The key to successful promotion is to obtain maximum return on resources expended. Table 6.3 clarifies the point at which diminishing returns will occur for the various forms of sales promotions.

Benefits may also accrue by deploying sales force resources properly. A firm's inside sales force may economically maintain existing products. Firms, which pursue a cost leadership strategy in price-sensitive segments, may not want to allocate additional resources to the outside sales force. On the other hand, for segments that are based upon differentiation, it may be beneficial to increase the outside sales force to communicate the unique advantages of a firm's new or repositioned products to the customer base.

Distribution Variable

Distribution refers to the channels by which goods are moved to customers. Types of activities include **order processing**, **inventory management**, **materials handling, warehousing**, and **transportation**. Planning an efficient physical distribution system is crucial to developing an effective marketing strategy because it can decrease costs and increase customer satisfaction. Speed of delivery, service, and dependability are often as important to customers as price[11]. An integrated distribution channel can reduce cycle time: the time period from completion of manufacturing to delivery to customers.

Order processing is the receipt and transmission of sales order information. Computerized order processing provides a database for all supply chain members to increase their productivity. When carried out quickly and accurately, order processing contributes to customer satisfaction, decreases costs and cycle time, and increases profits. Many companies use electronic data interchange (EDI) to integrate order processing with production, inventory, accounting, and transportation. Within the supply chain, EDI functions as an information system that links marketing channel members and outsourcing firms together.

Inventory management involves having the right goods in stock to satisfy customer demand without creating excessive inventory levels. Many firms utilize a Just in Time (JIT) approach to inventory management. When using JIT, companies maintain low inventory levels and purchase products and materials in small quantities whenever they need them. Just In Time inventory management requires a high level of coordination between producers and suppliers, but it eliminates waste and reduces inventory costs significantly.[12]

Materials handling involves the physical handling of products. Efficient procedures and techniques for materials handling minimizes inventory costs, reduces the number of times a good is handled, improves customer service, and increases customer satisfaction. Systems for packaging, labeling, loading, and movement must be coordinated to maximize cost reduction and customer satisfaction. Organizations gain considerable efficiencies in materials handling through the use of technologically advanced electronic equipment.

Warehousing represents the storage of goods before shipment to consumers. Over the past 20 years, warehousing has been radically transformed. The warehouses of today are single story facilities that are operated by computer systems. These systems are based upon heavy utilization of robotics. The use of robotics tends to reduce costs and create greater efficiencies.

Transportation represents the physical movement of goods. This is the most expensive aspect of distribution. The various modes of transportation include truck, rail, barge, air, ocean shipping, and pipelines. The choice of mode is dependent upon the service requirements of the customer and type of shipment that is being transported. Recently, transportation firms have become multi-modal carriers. Multi-modal carriers utilize more than one mode (e.g. rail, trucking) for transportation of products. Union Pacific, a major U.S. railroad, has strategic alliances with trucking firms, airfreight forwarders, ocean shipping firms, and international railroads.[13]

The success of a firm's distribution function depends upon the degree to which all aspects are integrated. An integrated network provides for an efficient system that meets customer needs better than competitors.

Within the Capstone Simulation, increasing the number of distributors increases the firm's network to provide for an efficient network to meet consumer demand. Each distributor costs $100,000 with diminishing returns beyond 50. The TQM (total quality management) module of the simulation also captures distribution elements. Channel Support Systems increase demand by adding valuable tools for the sales force. Just in Time (JIT) and Continuous Process Improvement (CPI) tend to reduce costs associated with distribution.

Branding

The first paragraph of this chapter is of crucial importance to firm growth. One way to grow, both domestically and internationally, is to have a strong brand value. Table 6.4 shows the top 10 brands in the world. The United States holds the top 7 and number 9 positions in terms of brand value. Samsung holds the number 8 position and Toyota holds the number 10 position. What is common to many of these firms is that they were founded by industry innovators (#1 Steven Jobs; #2 Mark Zukerman; #5 Bill Gates; #7 Ray Kroc). Five of the top 10 are technology based (#1- Apple; #2- Google; #5- Microsoft; #8- Samsung; #9- Intel.

A firm which has high brand value may permit easier entry into some markets and provides insulation in difficult times. This concept of "insulation in difficult times" needs to be explained.

In the early 1980's, someone put cyanide in Tylenol capsules in Chicago and New York. These capsules results resulted in several deaths. Tylenol acted very quickly and decisively. Johnson and Johnson, the firm which owns the Tylenol brand, removed all bottles of Tylenol capsules from all U.S. locations. Each capsule in each bottle of Tylenol was tested for cyanide. After all bottles had been tested, Tylenol decided that it needed a way to assure the customer base that its capsules were safe. Johnson & Johnson introduced safety seals. Today, most consumers goods products have safety seals. This action to a tragedy identified Tylenol's commitment to providing safe products.

Firms with lower brand values may not have been so successful. General Motors has been reluctant to recall cars which had been source of several deaths and/or may have been slow to react. These deaths have been caused by the malfunction of an $11 part. While G.M. has returned to profitability, its brand value of $6.4 billion (2013) was way down the list. It was below most European and Asian auto manufacturers.

Table 6.4
Top Brands and Brand Values

2013 Rank	2012 Rank	Brand	Brand Name	Region/Country	Sector	Brand Value ($m)
1	2		Apple	United States	Technology	98,316
2	4		Google	United States	Technology	93,291
3	1		Coca-Cola	United States	Beverages	79,213
4	3		IBM	United States	Business Services	78,808
5	5		Microsoft	United States	Technology	59,546
6	6		GE	United States	Diversified	46,947
7	7		McDonald's	United States	Restaurants	41,992
8	9		Samsung	South Korea	Technology	39,610
9	8		Intel	United States	Technology	37,257
10	10		Toyota	Japan	Automotive	35,346

Discussion Questions

1. Explain why it is necessary to segment markets. What happens to firms if they do not?

2. Why is it important to sustain relationships with customers over time?

3. What are the ramifications of sales forecasts that are too high? Too low? Explain using the Capstone Simulation.

4. Explain the fundamental relationship between key buying criteria, competition, and your Capstone firm.

5. Using the Capstone Simulation, explain when new product development is recommended versus R&D of existing products.

6. From the perspective of the simulation, what determines customer awareness? Infrastructure?

7. Identify market segments within an industry of your choice. Identify the key buying criteria of each segment.

8. What method of forecasting does the simulation utilize? Explain.

9. Assume your firm is entering a new market segment. What approach is recommended for forecasting sales?

10. What are the primary weaknesses of using perceptual mapping?

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Embraer Mini Case

Embraer is a Brazilian manufacturer of jet aircraft. Its products consist of commercial aircraft (less than 100 passenger), executive jets and small defense aircraft. The defense aircraft are sold to the Brazilian Air Force and to other military customers in Europe, Asia, and Latin America.

Table 1 provides an overview of financial data.

Table 1 Financial Data			
Year	2011	2012	2013
Revenue ($ billions)	9.86	12.20	13.64
Net Income ($ billions)	156.3	697.8	777.6
EPS	.22	.96	1.06

All metrics have increased significantly since 2011. Embraer has a global reach.

Table 2 Revenue by Region (2013)	
Market	**Revenue by Region (Percentage)**
North America	43
Europe	18
Asia Pacific	18
Latin America	10
Brazil	9
Other	7

Embraer has evolved from an aircraft manufacturer who provides aircraft to Brazilian airlines to a global provider of small jet aircraft.

Because of this growth, Embraer has established plants in China, France, Portugal, Singapore, and the United States.

Embraer's primary competitor is Bombadier. Bombadier is a Canadian based manufacturer of jet aircraft.

Discussion Question:

1. Who will be successful in the future: Embraer or Bombadier?

Chapter 7

Growth by Internal Development

Learning and Assessment Goals

1. Understand how a firm can grow using internal development.

2. Understand when a firm should grow by internal development as opposed to acquisitions or strategic alliances.

3. Understand how a firm can identify new markets and develop products/services to meet these new markets.

4. Understand the role of competition as it impacts a firm's internal development decisions.

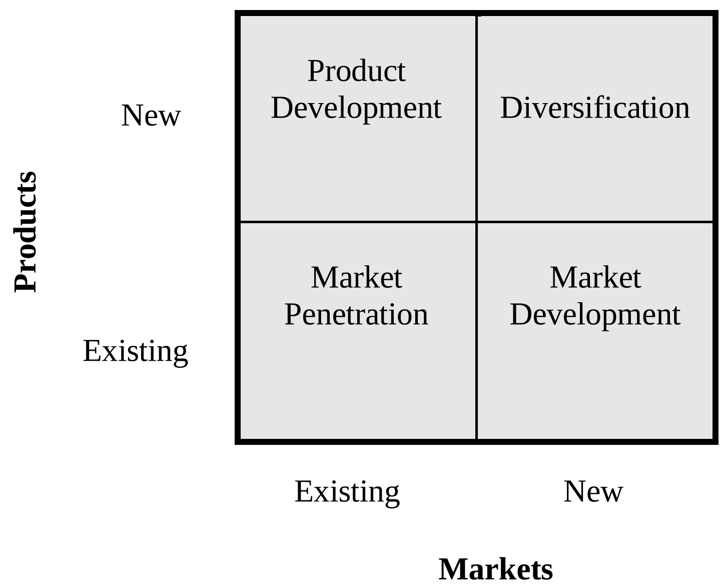
5. Determine how to allocate resources to maximize opportunities for internal development.

Firms have choices with respect to growth. Internal development, acquisitions, and strategic alliances represent alternative modes of growth[1, 2, 3]. This chapter will focus upon the opportunities where internal development is utilized. Internal development is based upon the firm developing products/services that are sold in markets with its own resources. Acquisitions and strategic alliances will be discussed in the next two chapters.

Internal Development Strategies

Ansoff[4] was one of the first scholars to address how product/market positions are internally developed over time. Ansoff's original matrix is contained in Figure 7.1.

Figure 7.1
Growth Matrix



Source: Adapted with permission from the Harvard Business Review from *Strategies for diversification* by I. Ansoff. January- February. 41. 1957.

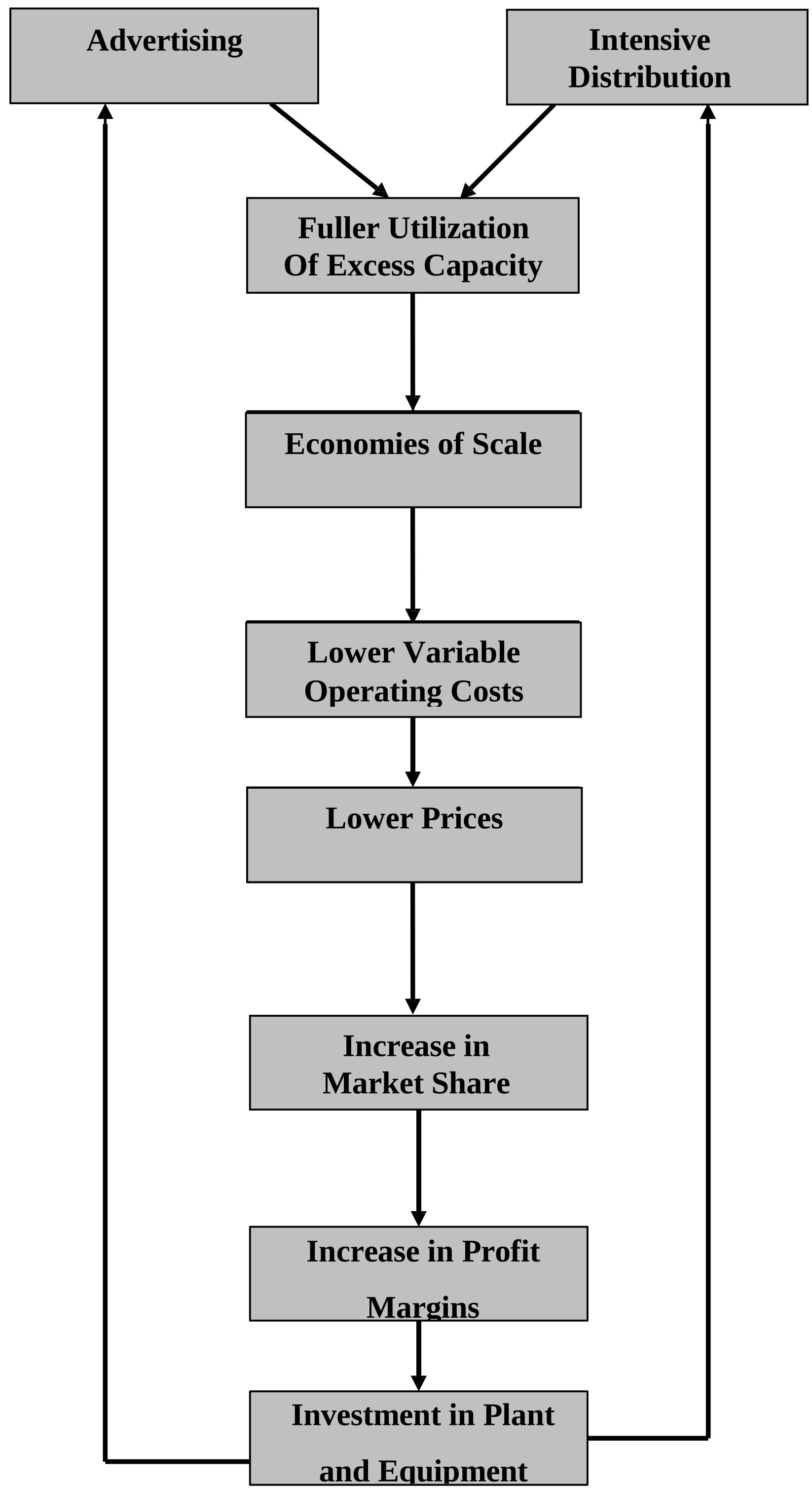
To Ansoff, firms would initially attempt to more fully develop existing products within existing markets (market penetration). Next, firms would utilize existing products in new markets (market development). Third, firms would develop new products for existing markets (product development). Finally, firms would develop new products for new markets (diversification). Market penetration will be discussed first.

Market Penetration

A firm's first growth option is to more fully develop existing markets with existing resources. Growth is driven by the utilization of excess capacity[5]. Normally, excess capacity refers to excess production capacity[6]. Thus, firms would initially utilize excess capacity to more fully develop existing markets (market penetration). This excess capacity may provide the firm with a scale advantage in its existing markets.

Market penetration consists of an interrelated set of conditions. A market penetration model is presented in Figure 7.2.

Figure 7.2
Market Penetration Process



Market penetration attempts to target customers who are members of the firm's target market segment but not aware the firm's products exist. These customers have the same key buying criteria as existing customers. One way firms increase market penetration is to advertise. Advertising communicates the potential advantages of a good or service to customers who may be unaware that these products/services exist. This is one reason why billions of dollars are spent on advertising existing products. Another way of developing greater market penetration for a firm's existing products is through more intensive distribution. Intensive distribution is used when firms utilize multiple channels to provide easily accessible products to consumers. Coke is an example of a firm that utilizes intensive distribution.

The primary focus of market penetration is increasing the size of a firm's existing market segment. Firms will more fully utilize production facilities to achieve economies of scale. One reason economies of scale are generated is because of experience curve effects. Experience curve effects allow firms to "learn by doing"[7]. As firms gain experience, processes can be more finely tuned to generate substantial variable cost savings. As cost savings are generated, firms may pass these savings along to consumers in the form of lower prices. For price sensitive markets, decreases in price may result in an increase in market share. As firms obtain additional market share, variable costs may be reduced and profit margins increased. Higher margins may result in additional funds to increase production facilities via investment in plant capacity.

The cycle then repeats: the additional production capacity that is purchased may not be totally utilized. As such, the firm will engage in advertising to further increase market share. As the firm more fully develops its distribution infrastructure, the products become more accessible and excess capacity is more fully utilized. This process results in greater economies of scale. The firm then lowers price to achieve greater market share and lower variable costs. As profit margins increase, the funds are utilized to purchase more plant and equipment. The cycle then repeats indefinitely. As shown in Figure 6.2, this process will provide the firm with a continuous scale advantage within existing markets.

Market Development

After the firm has fully developed its products in one market, firms can enter new markets from a position of strength[8]. As domestic markets become more mature, firms expand into international markets to generate growth. As firms expand into additional markets, they can begin to generate global economies of scale. After Gillette fully developed the United States market, it developed positions in many international markets for razors and blades. Initially, Coors was a beer that was distributed in the Rocky Mountain States. Coors now has substantial international market presence.

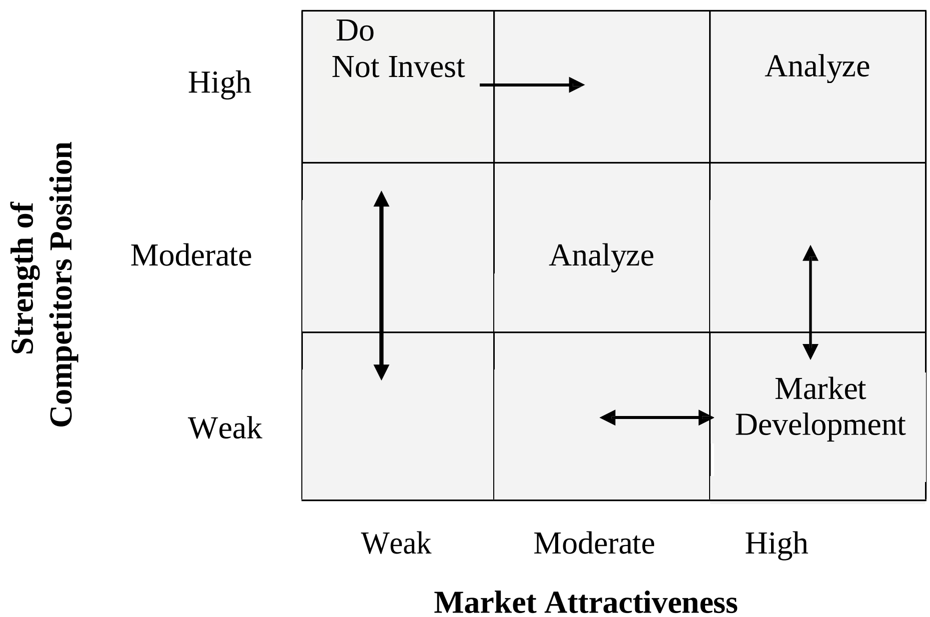
In general, the more related the new market is to the firm's core market, the greater the firm can reduce entry costs by internal development. After United Parcel Service (UPS) had fully developed its ground infrastructure within the United States, it expanded into Europe. Initially, UPS expanded into Europe via direct investment rather than by acquisition. This decision looked to be based on the understanding that acquisitions may not be wise because they are likely to entail the purchase of redundant assets[9]. Walmart would be an example of a firm which has grown internationally via market development. In addition, the Harry Potter books and movies have been translated into over 70 languages. Additionally, over 135 million individuals have seen "The Phantom of the Opera".[10]The key is to grow into those markets that demand a firm's existing products.

As firms establish positions in international markets, they may begin production in these markets. In this way, firms eliminate the additional costs associated with distribution from a domestic market to international markets. To position against international competitors, firms may eventually move production to low cost markets. Sony has production facilities all over the world that reduces operating costs for the production of electronics and gaming products. In this way, the firm can maximize profit margins.

Once a firm's international infrastructure is in place, firms can move various products through this network. The expansion of firms into international markets tends to create global economies of scale. Not only can firms generate economies of scale from a production perspective; firms can also generate economies from a distribution perspective. The above discussion assumes that customers in international markets require the same products as domestic customers. International Strategies, Chapter 10, addresses this issue.

Which new markets to develop first will depend upon the overall attractiveness of the market and competitive positioning? This relationship is illustrated in Figure 7.3.

Figure 7.3
Assessment of Market Attractiveness and Competitive Positions



Market attractiveness can be evaluated based on various factors. Some factors to consider include overall market size, growth rate, availability of raw materials, scope of the distribution infrastructure, and the position of government with respect to expansion.

Competitive position is evaluated based on a different set of factors. Some factors to consider include competitors' core capabilities, price competitiveness, strength of position on key success factors versus competition, capacity to reduce costs, and size of market share. For a complete analysis of market attractiveness and a firm's business strengths, refer to Chapter 8, Corporate Level Strategy and Restructuring.

For those markets where competitors hold dominant or moderate positions relative to your firm, market expansion is not recommended. Dell's position in the P.C. market is an example. In many cases, funds should be shifted to markets that are more attractive or to markets where competition has a weaker position. Market development should be analyzed in highly attractive markets where competition is strong. Microsoft's entry into the gaming industry would be an example.

For unattractive markets, the firm should expand elsewhere. For example, the low-end retail market in the U.S. is dominated by Wal-Mart. For markets that are moderately attractive and have a moderate degree of competition, the firm should analyze. Entry into the health conscious fast food market is an example.

Market development should be undertaken if the markets are highly attractive and competitors do not have a strong position. Gillette's expansion into Japan would be an example. Levi's expansion into markets such as India, which has an emerging middle class, would be another example. With Apple's iPhone and iPad series of products, the company's overall industry dominance is common knowledge. This current market presence provides the best example of having the ability to focus on market development within the emerging markets as the competition in these areas would be considered weak to moderate at best. For markets which are moderately attractive and in which competitors have a weaker position relative to your firm, market development should occur. FedEx's expansion of its air network is an example.

Product Development

After a firm has fully developed its markets, the firm will develop new products for existing customers[11]. New products are necessary for achieving longer-term competitive advantage. These products may add value to existing products. Intel's improvements in chip technology increase the capabilities of PC's and cell phones. Multi-player social gaming using such software as PlayPhone, with devices including the Android and iOS[12], appears to be the next generation of gaming

As new product features are integrated into existing products, the firm creates new sources of value. The cell phone can now be utilized to store data, take pictures, provide access to the Internet, and transmit video. As such, these cell phones incorporate new products that add value to the existing cell phones. These new products provide new, value added benefits to customers. The development of ethanol as an alternative fuel source is another example. New processes can also be developed to manufacture new products.

One type of process is flexible manufacturing facilities. Because consumers have different needs, flexible manufacturing helps to reduce the time and expense of assembling new products. Automotive and motorcycle manufacturers utilize a great deal of flexible manufacturing. Because these processes are specific to a firm, these assets are developed via internal development. By internally developing new processes, the firm can begin to build a barrier to entry for competitors.

Product development can also be utilized to meet emerging consumer needs. After the trucking industry was deregulated in 1980, firms began to develop information systems to track shipments in transit. These systems improved the capability of the firm to meet emerging customer needs. The utilization of robots in assembly lines is a process that reduces costs and improves product consistency. By the firm internally developing products and processes, the firm does not need to engage in costly acquisitions or risk technology transfer that may occur with strategic alliances.

The degree to which products need to be changed will determine whether a product is improved or a new product should be developed. This decision is based upon R&D expenditures and the profitability of the product line. Figure 7.4 illustrates this relationship.

Figure 7.4
Products and R&D Investments

R&D Expenditures	Product Line Profitability: Low	Moderate	High
High		Analyze	New Product Development
Moderate	Consider Product Elimination		Revise Products
Low			Revise Products

The firm should consider eliminating marginally profitable products. Investments could then be made in product lines that are more profitable. The key is to utilize investments to generate the highest returns possible. For products that have high profit potential and high R&D investments, it may be wise to create new products. For example, some diseases have no cures. As such, new products need to be developed. These types of products normally require significant R&D investments.

For products that require moderate or low R&D expenditures and generate moderate to high profitability, revision of existing products is normally the strategy to utilize. Videophones have high profit potential and require a moderate level of R&D (e.g. modification of existing cell phone technology). Products such as online courses have a relatively low level of R&D expenditures and have moderate profit potential. For products that require high R&D expenditures and which are moderately profitable, the firm must analyze the expense in R&D with respect to other alternatives for the funds. Ways of reducing R&D expenditures should also be analyzed.

With the expense of bringing a new drug to market now exceeding $1 billion, pharmaceutical companies are increasingly searching for low-cost alternatives. China is becoming a market for firms to conduct R&D at greatly reduced costs. Novartis AG has recently formed a partnership with the government-run Shanghai Institute for MateriaMedica. Scientists will identify compounds derived from traditional Chinese medicine that Novartis scientists may be able to develop into new drugs[13]. Roche Ltd. has built a research-and-development center in Shanghai, which will employ 40 local scientists. Pfizer is spending $175 million on establishing a new regional headquarters in Shanghai[12]. This office will oversee existing manufacturing and marketing operations. Pfizer is considering building its own R&D center in China.

Firms can hire lower cost Chinese scientists because about 80% of pharmaceutical R&D costs go toward scientists' salaries[14]. The key point is to utilize R&D investments to maximize the returns on revised or new products.

New product development means that the firm must innovate. Innovation is crucial for firm growth. Innovation may be the only true source of differentiation that can distinguish one firm from another. The rapid change and diffusion of new technology, along with substantial competition in domestic and international markets, has placed increasing importance on firms' ability to innovate and to introduce new innovations into the marketplace. In fact, innovation may be required to maintain or achieve competitive parity in many global markets[15]. Innovation (whether developed internally or acquired) is a source of value creation and competitive advantage for individual firms[16]. However, learning how to manage the research and development activities that permit innovation on a global scale is challenging[17].

Thus, in both domestic and international economies, innovation increasingly is recognized as a key link to the firm's strategic competitiveness[18]. Moreover, because it challenges the firm to be continuously devoted to strong product lines and taking actions that will cause the goods in those lines to be improved constantly, innovation is a factor that differentiates companies from competitors[19]. Although difficult and challenging, effective innovation is a critical part of the skill set that firms need to participate successfully in markets. Evidence of a relationship between high innovative propensity and sustained superior profitability for U.S. pharmaceutical companies can be interpreted as fairly strong support of the decision to allocate resources to innovation[20].

If pharmaceutical firms do not innovate, they do not stay in business. Eli Lilly & Co. is ready to launch Prasugres, an anti-clotting drug designed to prevent recurring heart attack and strokes[21]. Novartis and other pharmaceutical firms are looking to genemapping to develop new drugs and vaccines because bestsellers like Dicvan (the market leader) and Zometa are coming off patent protection soon[22].

Diversification

To Ansoff, diversification resulted from the development of new products utilized in new markets. This definition differs from the classical use of the term diversification. Diversification is a corporate level strategy concept. Corporate level strategy is discussed in Chapter 7. Ansoff uses the term from a business level strategy perspective. A simple way to understand this concept is to view it as combining market development with product development. By utilizing new products in new markets, the firm can increase its growth. An assumption is applied using this logic: it assumes that new products can be sold in new markets. In other words, products are standardized across markets. In many countries, product adaptation is required. This issue is more fully developed in Chapter 10, International Strategies. Whether firms use market penetration, market development, product development, and/or diversification, competition must be evaluated.

Competition

For the most part, the growth decisions that have been discussed have not factored in competition. Decisions that respond to competitor's actions (e.g. new products) are required. Products must meet the customer's key buying criteria superior to competition. As customers' needs change, firms need to develop new products or re-position existing products to maintain competitive superiority. If they don't, they may lose market share.

Firms can be successful as second movers but they need to respond before the first mover has an established customer base. If your firm can anticipate competitors' moves, actions can be taken to respond to these decisions quickly. Speed of implementation is important. The quicker the decisions are implemented, the sooner the firm can begin to accrue benefits. The first step is to determine whether or not your firm desires to change based upon competitors' actions. Not all competitors' actions are beneficial. For example, investing significant R&D funds in a price sensitive market may not be beneficial. In addition, if competitors make unwise decisions, your firm may be able to capitalize upon these weaknesses. For example, assume that a competitor exits a market segment that is profitable and a growth market for your firm. Increasing production will create greater demand for your firm because there will be a smaller number of firms in that segment. The Capstone Simulation can be utilized to ascertain how firms can grow in a competitive environment.

Internal Development and Capstone Simulation

The primary mode of growth that the Capstone Simulation utilizes is internal development. In order to grow, the firm must determine direction of growth. As discussed in Chapter 6, Analysis of Markets and Positioning, direction of growth is determined by a firm's initial conditions, the size and growth rate of each segment, the key buying criteria, and competitor's positioning. Market penetration using the Capstone Simulation will be discussed first.

Growth by Market Penetration

As is shown in Table 7.1, Section a, under Traditional Statistics, the segment demand (11,471 units) was not met. Firms could have sold an additional 1117 (11,471-10,354) units if they had produced more. Referring to the production analysis (Section b), we can calculate the production capacity for this segment by examining the capacity next round for each product.

Table 7.1
Market Penetration
Section a

Traditional Market Segment Analysis		
Traditional Statistics		
Total Industry Unit Demand		**11,471**
Actual Industry Unit Sales		**10,354**
Segment % of Total Industry		29.4%
Growth Rates		1.092%
Traditional Customer Buying Criteria		
Criteria	*Expectations*	*Importance*
1. Age	Ideal Age = 2.0	**47%**
2. Price	$17.50 – 27.50	**23%**
3. Ideal Position	Pfmn 8.5 Size 11.5	21%
4. Reliability	MTBF 14000-19000	9%

Section b Production Capacity and Plant Utilization		
Product	**Capacity Next Round (Units)**	**Plant Utilization (Percentage)**
Adam	1200	198
Chunt	500	198
Daze	1800	65
Duwaa	600	68
Eat	1300	190
Total	**5400**	

Total first shift capacity for the next round is 5400 units. Because demand is growing at 9.2 percent (section a), demand for next year is (11,471) (1.092) =12,526 units. Firms will need to add capacity to meet the increased demand.

Since demand was not met, Daze and Duwaa need to increase production. To utilize excess capacity Daze's plant utilization is 65 percent and Duwaa's utilization is 68 percent.

With demand at 12,526 units next year and 1st shift capacity at 5400 units, all firms that remain in this segment should be producing at 100 percent overtime.

For next year, the price range will be between $17 and $27. Since demand cannot be met with both 1st and 2nd shift capacity of products within this segment, all firms should price at $27.

Growth by Market Development

At the beginning of the simulation, all firms had one product in each segment. Upon examination of section b, Baldwin and Ferris no longer have products in the Traditional Segment. This is surprising because the Traditional Segment represents 32.4 percent of all segments' units in year 1 and 24.5 percent of all units in year 8. This is a segment in which all firms need to have products in.

In Chapter 6, we discussed that positive results can occur as a consequence of poor decisions by competitors. This is such a case: Baldwin and Ferris have withdrawn products from this segment which will allow all remaining well positioned firms in the segment to achieve maximum margins by pricing at the highest level ($27) (section a). The remaining segments are identified on the next page.

Table 7.2 Market Development Section a		
Low End Market Segment Analysis		
Low End Statistics		
Total Industry Unit Demand		**15.581**
Actual Industry Unit Sales		**14,399**
Segment % of Total Industry		37.3%
Growth Rates		11.7%
Traditional Customer Buying Criteria		
Criteria	*Expectations*	*Importance*
1. Price	**$12.50 – 22.50**	**53%**
2. Age	Ideal Age = 7.0	24%
3. Ideal Position	Pfmn 4.2 Size 15.8	16%
4. Reliability	MTBF 12000-17000	7%

Demand with the low-end segment was not met. Segment demand was 15,581 units and actual sales were 14,399 units. If we take $15 (range is $12.50 - $22.50) (section a) as a price per unit, the lost sales of 1412 units (15,811 – 14,399) accounted for approximately $21,180.

Table 7.3 Market Development Section a		
High End Market Segment Analysis		
High End Statistics		
Total Industry Unit Demand		5.410
Actual Industry Unit Sales		5,410
Segment % of Total Industry		13.0%
Growth Rates		16.2%
Traditional Customer Buying Criteria		
Criteria	*Expectations*	*Importance*
1. Ideal Position	Pfmn 13.4 Size 6.6	43%
2. Age	Ideal Age = 0.0	29%
3. Reliability	MTBF 20000-25000	19%
4. Price	$27.50 – 37.50	9%

The demand in the High End Segment (5410 units) was met. As such, some firms had inventory. This will be discussed in the "Growth of Product Development" section.

Table 7.4 Market Development Section a		
Performance Market Segment Analysis		
Performance Statistics		
Total Industry Unit Demand		**4,726**
Actual Industry Unit Sales		**4,479**
Segment % of Total Industry		11.3%
Growth Rates		19.8%
Performance Customer Buying Criteria		
Criteria	*Expectations*	*Importance*
1. Reliability	MTBF 22000-27000	43%
2. Ideal Position	Pfmn 14.4 Size 12.5	29%
3. Price	**$22.50 – 32.50**	19%
4. Age	Ideal Age = 1.0	9%

In the Performance Segment, industry demand was 4726 units and industry sales were 4479 units. Sales of 247 units (4726 – 4479) were not met. Taking an average price of $25 per unit, $6175 of demand was not met.

Table 7.5 Market Development Section a		
Size Market Segment Analysis		
Total Industry Unit Demand		4,596
Actual Industry Unit Sales		4,596
Segment % of Total Industry		11.0%
Growth Rates		18.3%
Customer Buying Criteria		
Criteria	*Expectations*	*Importance*
1. Ideal Position	Pfmn 7.5 Size 5.6	43%
2. Age	Ideal Age = 1.5	29%
3. Reliability	MTBF 16000-21000	19%
4. Price	$22.50 – 32.50	9%

The demand in the Size Segment (4596) was met. As with the high-end segment, some firms had inventory. This will also be discussed in the “Growth by Product Development” section.

Growth by Product Development

To discuss growth by product development, the production spreadsheet needs to be reviewed. Digby’s products will be used as an example.

Product Development			
Name	**Primary Segment**	**Units Sold**	**Units in Inventory**
Daze	Trad	1,388	0
Dell	Low	1,593	0
Dixie	High	433	206
Dot	Pfmn	1,090	0
Dune	Size	603	189
Duke	High	594	0
Ditty	Size	297	0
Duwaa	Trad	1,009	0

The placement of Daze (Traditional), Duwaa (Traditional), Dot (Performance), Dell (Low End), and Ditty (Size) are well positioned (0 inventory). However, Dixie (High End) and Dune (Size) are not competitive products within each segment. Dixie has 206 units in inventory. Dune has 189 units in inventory.

Dixie – High End Segment	
Units Sold	433
Units Inventoried	206
Revision Date	Sept. 15
Performance	12.3
Size	7.0
List Price	$37.50
MTBF	23,500
Age	1.7

Positioning in this high-end segment accounts for 43 percent of the customer buying criteria (Table 6.3). Dixie's performance (12.3) and size (7.0) positioning are quite a distance from the segment's ideal spot (performance 13.4, size 6.6) (Table 6.3 section a). In addition, the Dixie product had a late revision date (Sept. 15). Within the segment, several other products were positioned closer to the ideal spot and had earlier revision dates. If Dixie is to be competitive in this high end segment, it must be positioned closer to the ideal spot. The Dune product in the size segment had significant inventory (189 units). Let us discuss this product.

Dune – Size Segment	
Units Sold	603
Units Inventoried	189
Revision Date	Nov. 5
Performance	7.3
Size	5.6
List Price	$32.50
MTBF	20,000
Age	1.5

Forty-three percent of this segment's buying criteria is based upon positioning. The ideal position is 7.5 (performance) and 5.6 (size) (section a). The Dune product is very close: 7.3 (performance), 5.6 (size). However, the revision date of Nov. 5 is much too late. Dune did not achieve this ideal position until November 5. Revision date is a crucial statistic in any segment. Investments in TQM initiatives to reduce R&D cycle time are needed.

Growth by Diversification

New products that have been developed for one segment may be attractive to other segments over time. If new products are developed for the high-end market, they will age over time. As these products become older, they may be sold in other segments. Because these new products had originally been sold in the high-end segment, they may sell in the traditional and then low end segments if these products are not repositioned.

Discussion Questions

1. Explain the difference between market penetration, market development, and product development.

2. What does market penetration assume?

3. What action should your firm take for markets that are highly attractive and moderately competitive? Why?

4. Under what conditions should a firm undertake new product development as opposed to re-positioning products? Explain.

5. What primary mode of growth does the simulation utilize? Explain.

6. Explain how competition affects a firm's internal development decisions.

7. What internal development strategy should be undertaken for the High End segment of the simulation? Explain.

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Starbucks Mini Case

Starbucks is one of the largest specialty coffee shops in the world. In 1982, after returning from a trip to coffee bar in Milan, Italy (with its 1,500 coffee bars), Howard Schultz recognized an opportunity to develop a similar retail coffee-bar culture. Starbucks has now grown into a large multi-national firm. Starbucks initiatives for 2014 and beyond are as follows:

1. Build an international model that will achieve substantial economies of scale and grow profitability.
2. Lead the premium, specialty coffee segment of the industry
3. Build its Consumer Products Group (CPG) business
4. Accelerate growth in China
5. Reach new customers
6. Optimize and grow its U.S. retail business

Starbucks Financial Data			
Year	2014	2013	2012
Revenue ($ billions)	16.44	14.86	13.27
Net Income ($ billions)	2.06	.0083	1.38
EPS	2.71	.01	1.79

Starbucks believes it has the potential to build a portfolio of $1 billion brands. Sourcing, roasting and serving high-quality coffee will remain its core business, but it will be pursuing sustainable, profitable growth with a more diversified, multi-channel and multi-brand business model. In the near term, they are focusing on Starbucks VIA Ready Brew, Frappuccino beverages and the Tazo tea brand. These brands generate more than $2 billion in sales. It has experienced significant growth in its Seattle's Best Coffee brand. Starbucks (2013) has now 10 times more locations U.S. domestically and internationally than in 2009.

Discussion Questions:

1. Illustrate Starbucks position on Porter's generic business strategy matrix.

Chapter 8

Corporate Level Strategies and Restructuring

Learning and Assessment Goals

1. Understand the general relationship between types of diversification and performance.

2. Understand why senior managers and shareholders have different risk profiles from a diversification perspective.

3. Utilize industry analysis and firm business strengths assessment to determine a firm's competitive position.

4. Develop an understanding of where and how resources are allocated based upon different diversification scenarios.

Corporate level strategy and restructuring will be discussed in this chapter. Corporate level strategy examines what industries a firm should invest in and what industries a firm should not invest in. In Chapter 2, Industry Analysis, we discussed how industries are classified. Certain industries are more attractive than others. For example, a firm that is not currently in the tobacco or airline industry would not want to move into either of these industries. On the other hand, the pharmaceutical industry has higher profitability and growth potential[1]. However, the pharmaceutical industry may be unattractive because of high barriers to entry. While corporate level strategy is concerned with identifying attractive and unattractive industries, diversification is a process by which firms actually achieve positions within industries.

Diversification

One way to classify firms is based upon their level of diversification. A firm's level of diversification is based on the types of industries entered[2]. Diversification decisions can be classified into three types: low level, moderate to high, and very high levels. The SIC system can be utilized to determine level of diversification. Low levels of diversification would consist of firms that diversify primarily into the same 4-digit SIC code[3,4,5]. Moderate to high levels of diversification would consist of firms that diversify into the same 2-digit SIC code[6, 7, 8]. Very high levels of diversification would consist of firms that diversify into different 2-digit SIC codes[9,10,11].

Low levels of diversification are defined as businesses that have 70 percent or more of their revenues coming from a single business[12]. Firms that have a low level of diversification tend to grow within the same 4-digit SIC. Consolidated Freightways would be an example of a firm with low levels of diversification because trucking represents the majority of sales. Many firms that have low levels of diversification are only in one specific industry (e.g. airline industry, utility industry). One way to determine the level of diversification is to examine the number of industries that a firm competes in from a review of industry reports, annual reports and 10-K reports.

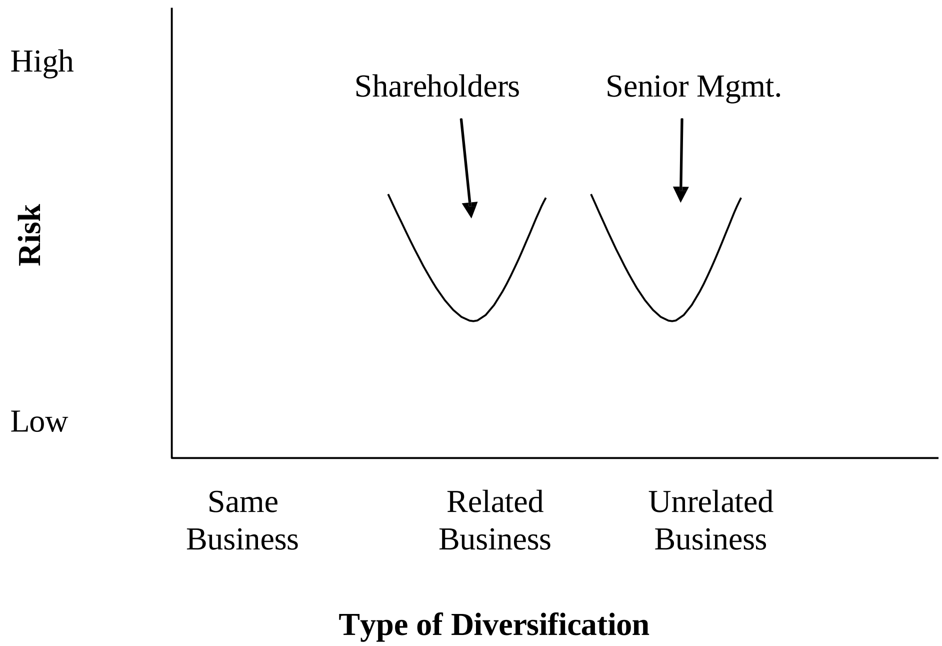
Moderate to high levels of diversification represent firms that generate less than 70 percent of revenues from a firm's core business but there are linkages between businesses[13]. Hewlett Packard would be a firm that exhibits moderate to high levels of diversification. Some linkages exist between their imaging and printing business and the P.C. business. Hewlett Packard utilizes the same distribution channels for their various businesses.

Very high levels of diversification represent firms that generate less than 70 percent of their revenues from a core business and there are no linkages between firms[14]. General Electric is a firm that has grown by investing in many different industries. For our purposes, firms that diversify within the same 4-digit SIC are referred to as same business. Firms that diversify within the same 2-digit SIC are referred to as related. Firms which diversify within different 2-digit SIC are referred to as unrelated. The performance consequences of alternative diversification strategies will now be discussed.

Diversification and Performance

Much of the strategic management literature examines level of diversification and performance[15]. The general relationship is illustrated in Figure 8.1:

Figure 8.1
Diversification and Performance Consequences



SOURCE: Adapted with the permission of Southwestern Publishing: A division of Thomson Publishing from *Strategic management* by M. Hitt, R. Ireland and R. Hoskisson, 312. 2005.

Performances tend to increase as firms move beyond their core business (same 4-digit SIC) and expand into related businesses (same 2-digit SIC)[16]. As firms move beyond their 2-digit SIC and expand into unrelated industries, performance tends to decline[17]. There are several reasons why this general relationship exists.

By remaining in the same business, firms may not be able to fully utilize the excess capacity of their resource base. By diversifying into related businesses, firms may create value by sharing resources and transferring skills from business to business[18]. Firms are likely to perform better by diversifying into a related business because the firm may have resources that can be effectively utilized within related businesses[19]. This process of resource sharing may create synergies that could not have occurred without venturing into related businesses. An acquisition example of this form of resource sharing and diversification by expansion into a related industry is InBev's 2008 acquisition of Anheuser-Busch.

Synergies represent cost savings that are created as a result of economies of scale or economies of scope. Economies of scale exist when cost savings are incurred as a result of greater utilization of a firm's resource base within its core business. More fully utilizing production capacity is an example of economies of scale. Economies of scale generally result in lower variable operating expenses.

Economies of scope are cost savings that are created by leveraging a firm's resources in related businesses. Economies of scope can be achieved by using the resources of the acquiring firm within the target firm's businesses. By diversifying into related businesses, a firm generates multiple revenue streams. When Boeing acquired McDonnell Douglas, it established a position in military aircraft manufacturing. With the commercial aircraft industry experiencing substantial cyclicality, the military aircraft business provides a more stable cash flow.

From Figure 8.1, firms that diversify into related industries tend to experience higher profit than do firms that acquire same industry or unrelated industry targets. Table 8.1 explains why this general relationship exists from a value chain perspective. The primary activities will be discussed first.

Diversification and Value Chain Analysis

Table 8.1
Value Chain Analysis by Type of Diversification

	Same	**Related**	**Unrelated**
Primary Activities			
Inbound Logistics	May provide redundant sources of locating and extracting raw materials	New network for existing products	Totally different networks
Operations	May be unable to generate economies of scale or scope	May generate additional economies of scale and scope	May need new production processes
Outbound Logistics	May provide redundant networks for moving products to final consumers	New network for existing products	Totally different networks
Marketing & Sales	May not need the target firm's sales person who has the same experience and contacts as the acquiring firm's sales team	Ability to sell products/services of both firms	May be no overlap of customer base
Service	Products of target's firm may have the same type of guarantees as the acquiring firm	Value added ways of providing service	Different products/markets may require new processes
Support Activities			
Firm Infrastructure	Target firm may have a total network which is very similar to that of the acquiring firm	Possible expansion of existing network (good for acquirer and target)	May be totally different products/markets
H.R.	Redundant human resources	New human resources which may find new sources of value	Problems with dominant logic
R&D	Target firm may have the same basic R&D capabilities as the acquiring firm	New capabilities (different ways of using resources)	May not be able to leverage R&D capabilities
Procurement	Target firm may have a similar network for locating either lower cost or higher quality materials	Target may have systems in place which could be leveraged	Different sources of raw material sourcing

Same Industry Diversification

From an inbound logistics perspective, the acquiring and target firm may utilize the same type of network for sourcing raw materials. The BHP Billiton's proposed (mining) $125 billion acquisition of Rio Tinto (mining) will not increase BHP Billiton's access to raw materials such as iron ore, copper, and uranium[20].

From an operations perspective, the target firm may not provide the acquiring firm with either economies of scale and/or economies of scope. Occidential Petroleum and OMV AG have invested $2.5 billion in the Libyan National Oil Co. to increase the output of Libya's oil fields[21]. This investment will be matched by Libyan National Oil Co. and will increase oil production in Libya from 100,000 barrels a day to 300,000 barrels a day[22]. However, Occidential Petroleum will only increase its capacity by 24,500 barrels a day due to government restrictions[23].

From an outbound logistical perspective, the target firm may not have larger networks in place to move finished goods to customers. Arcelor Mittal has increased its ownership of China Oriental Group (steelmaker) from 28 percent to 73 percent[24]. However, this acquisition does not allow Arcelor Mittal access to any more of China Oriental's infrastructure. Versasun's (ethanol producer) acquisition of U.S. Bioenergy will combine the number 2 and 3 ethanol producers behind Archer Daniels Midland (ADM)[25]. However, these two firms have redundant outbound logistics networks.

When an acquiring firm acquires a same industry target, sales and marketing personnel may overlap because products and services may be the same. As such, it may be necessary to lay off some of the target firm's sales and marketing staff due to this overlap. After Cerberus Capital Management's acquisition of Chrysler, hundreds of Chrysler's management team were laid off after Chrysler posted a $1.4 billion loss in 2006[26].

A same industry acquisition may result in additional service personnel who are no longer needed. When American Airlines acquired TWA, it acquired aircraft, some of which it did not need. In addition, American Airlines did not need all of the TWA mechanics. Redundant infrastructure becomes costly to maintain. Since U.S. Airways acquired America West, integrating the carriers infrastructure has been difficult[27]. Revenue in 2007 has decreased, profit has continued to fall, and the stock price has fallen $62 at the time of the acquisition (2006) to $16 in late December 2007[28]. A similar situation of layoffs, redundant personnel, and organization restructuring was experienced during the months after Oracle reached a firm agreement with Sun Microsystems in April of 2009.

Within same industry acquisitions, managerial capabilities are very similar to those of the acquiring firm. As such, the combined firms do not venture into related types of acquisitions which may generate more profitable firms. In addition, there are risks in staying in the same industry (e.g. tobacco industry).

From a human resources perspective, R&D capabilities between the acquiring firm and the target may tend to be similar. As such, opportunities to capitalize on new or related products/ services may not be undertaken. Even with a same industry acquisition, human resources may not be able to run the combined firms profitably. In 2006, Sprint acquired Nextel for $35 billion. In 2007, Sprint's COO was fired[29]. In addition, the CEO was forced to retire. The combined firms have been unable to combine their cellular networks and management teams to effectively run the combined firms[30]. At the time of the acquisition, the combined firms' stock price was $24; in August of 2007, the stock price was $16[31]. As of 2012, the stock has been trading at less than $5.00 per share.

Firms may acquire targets which have the same network for procuring either lower cost or higher quality materials. Transocean Inc.'s 2007 acquisition of Global SantaFe Corp. for $18 billion did not provide Transocean any more offshore oil sites[32].

Related Industry Diversification

From an inbound logistics perspective, related acquisitions allow firms closer access to raw materials. Port and railway networks in China can be merged to allow firms access to raw materials which they previously did not have. BHP's acquisition of Rio Tinto integrates port and railway infrastructures to create an inbound logistics network to give both firms greater access to copper, coal, and iron ore reserves.

From an operations perspective, related acquisitions allow firms to utilize assets to achieve economies of scale or scope. The $10.1 billion related acquisition of Trane by Ingersoll Rand allows for the more economical production of refrigerated trucks and transportation cooling systems for several modes of transportation[33].

From an outbound logistics perspective, related acquisitions provide new access for existing products and new products. Proctor and Gamble's acquisition of Gillette provided Proctor and Gamble access to international networks (e.g. Europe, South America) where it previously had a minimally developed network compared to its primary competitor, Unilever.

From a marketing and sales perspective, related acquisitions allow firms to differentiate their products from competitors. Microsoft's entry into the software mapping industry through the acquisition of Multimap allows Microsoft to effectively utilize its capabilities in related industries where it previously did not have a position[34].

From an infrastructure perspective, related acquisitions allow firms greater access to similar industries. Many of these acquisitions have been made by Chinese firms. Aluminum Corp. of China acquisition of Canada's Peru Copper and China Metallorgical Construction Group's acquisition of Australia's Balmoral Iron Holdings are two examples which allow the acquiring firms access to related businesses.

From a human resource perspective, the acquisition of intellectual capital from related industries provides new perspectives on how to achieve greater competitive advantage for both the acquiring and target firm. Cisco's John Chambers ability to integrate the various related acquisitions of Cisco has allowed Cisco to maintain its domestic position within core and related industries. Ping An (China) acquisition of Fortis NV (Dutch) has allowed Ping An to enter the life insurance industry[35]. This acquisition will help Ping An to develop its own insurance based banking network in China[36].

From a research and development (R&D) perspective, the ability to combine the capabilities of both firms to develop new products to service related industries allows firms to maintain competitive advantage. Johnson & Johnson, Merck, Pfizer, Bristol Meyers, Lilly and Astrazeneca are all examples of pharmaceutical firms which have made recent related acquisitions of bio tech firms because several brands of these firms are losing patent protection in the upcoming years (e.g. Lipitor (2011) – Pfizer, Fosamax (2008) – Merck)[37].

From a procurement perspective, related acquisitions have systems and procedures in place to find lower cost or higher quality products. Naspers (South Africa) acquired Tradus (London) to gain access to Eastern European markets for pay-television, internet, and print media assets[38]. This acquisition provides the capability to obtain these related assets at lower costs.

Unrelated Industry Diversification

From an inbound logistics perspective, unrelated firms usually have totally different logistics networks because they are designed for different products/services. The acquiring firm may not be able to utilize the target's infrastructure and vice versa. The same is true from an outbound logistics perspective because the acquiring and target firms may have different customer bases. Campbell Soup Co.'s acquisition of Godiva Chocolatier for $850 million required Campbell's to maintain two different inbound and outbound logistical networks[39].

Unrelated acquisition targets may have different types of operational facilities. As such, it may be difficult to achieve either economies of scope or economies of scale from an operations perspective. This situation makes it very difficult to achieve cost savings because synergies may be difficult to achieve. For example, Olympus, a camera maker, has acquired Gyrus Group, a United Kingdom Medical-instruments firm for $1.89 billion. Since these firms have totally different operational processes, it may be difficult to achieve any type of synergies or cost savings. Japan Tobacco's acquisition of Katokichi, a frozen foods maker, did not provide any operational synergies[40].

One aspect of unrelated acquisitions is that the sales, marketing, and service resources of the target firm may need to be maintained because they serve two totally different industries and customer bases. Different customer bases have different needs; training will need to be focused upon two discreet sales and marketing plans. Recently, Beer Brewer Kirin has acquired Australian Dairy and Soft Drink National Foods Company for $2.6 billion. These two firms maintain two distinct customer bases.

The human resource functions of both the acquiring and target firm will need to be maintained and any differences in terms of salaries and benefits need to be resolved before the acquisition is completed. If there is a significant difference between acquiring and target firm's compensation, this could cause problems with the workforce of the combined firms. In addition, if one workforce is unionized and the other is not, these major human resource issues will need to be resolved. The Warren Buffett Berkshire Hathaway 2009 acquisition of the BNSF Railroad is an elaborate example of various human resource and management related challenges that needed to be addressed. As is common in an unrelated industry acquisition, Buffett maintained the management team of the BNSF. In addition, the $1.91 billion acquisition of Tradus PLC, an internet auction firm, by media conglomerate Naspers Inc., required totally different managerial capabilities. As such, both management teams needed to be maintained.

Due to the unrelated nature of the acquisition, the acquiring firm may need to obtain two distinct R&D functions. These functions are likely to have minimal to no overlap. As such, two different budgets will need to be maintained. In addition, the two R&D functions will compete for resources. Unless the management team of the target firm is maintained, maximizing the return on R&D expenditures may be difficult. CIE FinanciereRioyemont's acquisition of British American Tobacco required R&D capabilities in luxury goods and tobacco[41]. As such, R&D capabilities of the acquiring firm could not be leveraged.

Diversification and Risk

As firms move from related to unrelated businesses, returns tend to decline. One explanation for this is because of managerial risk motives. This risk relationship between managers and shareholders is different for different levels of diversification.

Shareholders' risk is minimized by the firm engaging in related diversification. As discussed above, related diversification is likely to result in economies of scale and/or economies of scope. These cost savings generally result in higher margins and lower levels of risk for shareholders.

However, as firms engage in unrelated diversification, firms tend to develop a portfolio of businesses that have different risk profiles and differing levels of cash flow. As such, risk is minimized for the senior management team by engaging in unrelated diversification. Shareholders do not need to minimize their risk because they can diversify their portfolios among many different firms.

However, investments in unrelated diversification can result in managerial problems associated with dominant logic[42]. Managers' knowledge is best applied to industries with which they are familiar. Venturing into "uncharted waters" may stretch a firm's managerial team beyond their capabilities. As firms move further away from their core industry into more unrelated industries, issues such as competition, customer preferences, stage of industry life cycle, and demand for product/services may be distinctly different. In addition, a firm's resources in its primary industry may not be able to be utilized to create economies of scale or scope in unrelated industries. The relationship between a firm's business strength and industry attractiveness is of critical importance.

Business Strengths and Industry Attractiveness

In order for a firm to profitably diversify, the firm must be able to determine the relative attractiveness of industries. In addition, the firm must make some judgment in terms of its own strengths. One approach to examining both issues is the General Electric (G.E.) matrix. A modified G.E. matrix is illustrated in Figure 8.2.

Figure 8.2
G.E. Matrix

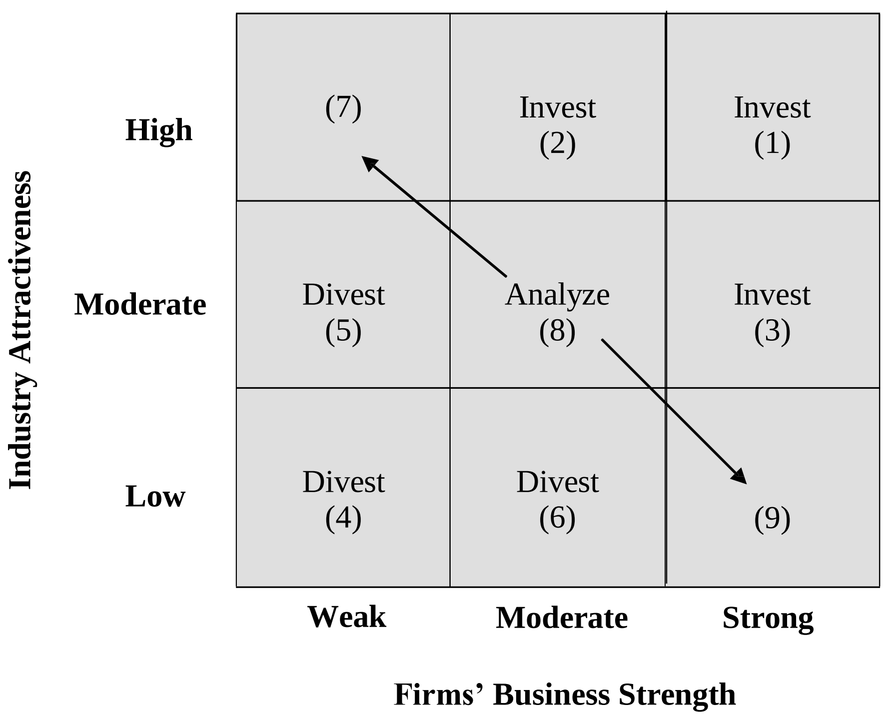


Figure 8.2 identifies what actions a firm should take based upon the level of industry attractiveness and the firm's business strengths. Figure 8.2 illustrates that firms would invest in highly attractive industries in which they have strong business positions (1). Investments in highly attractive industries in which the firm has moderate business

strength is also recommended (2). Investments are needed in moderately attractive industries in which the firm has a strong business strength position (3).

Table 8.2 Determining Industry Attractiveness					
Criteria	**Weight***	**Score** (Value)*****			
		Industry 1	**Industry 2**	**Industry 3**	**Industry 4**
1. Market Size	.10	8(.8)	4(.4)	3(.3)	6(.6)
2. Industry Growth Rate	.10	8(.8)	6(.6)	7(.7)	2(.2)
3. Cumulative Industry Profitability	**.25**	**9(2.25)**	**8(2)**	**4(1)**	**5(1.25)**
4. Favorable Industry Structure	.05	8(.4)	6(.3)	7(.35)	4(.2)
5. Role of Technology	.10	9(.9)	9(.9)	4(.4)	2(.2)
6. Presence of multi-national firms	.05	2(.1)	2(.1)	3(.15)	2(.1)
7. Cumulative free cash flow	.05	5(.25)	4(.2)	6(.3)	7(.35)
8. Lack of Industry Competitiveness	**.25**	8(2)	**4(1)**	8(2)	9(2.25)
9. Market Capitalization	.05	8(.4)	6(.3)	4(.2)	4(.2)
Total	1.00	**7.90**	5.80	5.40	5.35

*Weights are assigned by senior management based upon how important one criterion is when compared to others.
**Scores are based upon a 1 to 10 scale where 1 is poor and 10 is excellent.
***Value consists of the weight of each factor multiplied by the firm's score.

Industry Attractiveness

Industry attractiveness (Table 8.2) is measured based upon numerous factors: some factors which are important are (1) market size, (2) industry growth rate, (3) cumulative industry profitability, (4) favorable industry structure, (5) role of technology, (5) presence of multi-national firms, (7) cumulative free cash flow, (8) lack of industry competitiveness, and (9) market capitalization of firms within the industry.

A hypothetical industry attractiveness analysis is conducted in Table 2. Cumulative industry profitability (criteria 3) and lack of industry competitiveness (criteria 8) are the most important factors for determining industry attractiveness. Cumulative industry profitability is marginally greater for Industry 1 compared to Industry 2. Industry 1 has significantly higher cumulative profitability when compared to industries 3 and 4.

All industries, with the exception of Industry 2, are not experiencing a high level of competition. Based upon higher cumulative profitability and lower industry competitiveness, Industry 1 would be the most attractive industry to enter. Overall, this industry is more attractive (7.90) than Industry 2 (5.80), Industry 3 (5.40) and Industry 4 (5.35). Determining a firm's business strength within Industry 1 will now be discussed.

Business Strength

To determine firm business strengths the same general process would be utilized as was used for determining industry attractiveness. A firm's business strength is measured based on an evaluation of numerous factors: some factors which are important are (1) market share, (2) firm growth rate, (3) depth and breadth of product lines, (4) distribution infrastructure, (5) price competitiveness, (6) promotion coverage, (7) productivity, (8) access to raw materials, (9) quality/price tradeoff, and (10) product and process R&D.

A business strength analysis should be performed for your firm and all competitors within each industry. Assume that Industry 1 has 4 existing competitor firms (A,B,C,D). Table 8.3 is an example.

Table 8.3
Business Strength Assessment : Industry 1

Criteria	**Weight***	**Score** (Value)*****			
		Firm A	**Firm B**	**Firm C**	**Firm D**
1. Market Share	.10	7(.7)	8(.8)	6(.6)	4(.4)
2. Firm Growth Rate	.10	8(.8)	9(.9)	4(.4)	2(.2)
3. Depth and Breadth of Product Lines	.05	6(.3)	4(.2)	7(.35)	3(.15)
4. Distribution Infrastructure	.10	9(.9)	8(.8)	4(.4)	5(.5)
5. Price Competitiveness	.10	**9(.9)**	**7(.7)**	**5(.5)**	**2(.2)**
6. Promotion Coverage	.05	8(.4)	7(.35)	6(.3)	5(.25)
7. Productivity	.10	**9(.9)**	7(.7)	4(.4)	6(.6)
8. Access to Raw Materials	.05	9(.45)	4(.2)	3(.15)	2(.1)
9. Quality/Price Tradeoff	.15	**9(1.35)**	**8(1.2)**	**7(1.05)**	**5(.75)**
10. Product and Process R&D	.20	**9(1.8)**	**6(1.2)**	**7(1.4)**	**3(.6)**
Total	1.00	**8.50**	**7.05**	**5.55**	**3.75**

*Weights are assigned by senior management based upon how important one criterion is when compared to others.
**Scores are based upon a 1 to 10 scale where 1 is poor and 10 is excellent.
***Value consists of the weight of each factor multiplied by the firm's score.

Firm A would have the strongest business strength (8.50) in Industry 1. Firm A has the highest total score of all 4 firms. Within this industry, the most important criteria is product and process R&D (criteria 10). Firm A's superiority in product R&D may allow it to sustain a superior position with respect to competitors. The second most important criteria is quality/price trade-off (criteria 9). Firm A has a better quality/price tradeoff than other competitors. Future investments in product R&D may create new products to provide differentiation for other competitors. Investments in process R&D may improve efficiency and productivity. These investments may allow Firm A to charge lower prices. Currently, Firm A is very competitively priced (Criteria 5) with respect to other firms. These lower prices may increase market share and generate economies of scale.

Firms C and D should exit Industry 1 because Firms A and B (Table 8.3) have stronger overall business strength positions. Firms C and D should determine their relative business strengths in industries 2, 3, and 4. Following an analysis similar to that in Table 2, firms C and D may have much stronger business strength positions in industries 2, 3, and/or 4.

Firm B's approach is less clear. Industry 1 has the highest industry attractiveness (Table 6.2). If Firm C or D exits, Firm B may be able to increase its market size within Industry 1. Firm 2 should conduct the business strength assessment to determine its relative business strength in Industry 2, 3, and 4. Firm 2 should allocate more funds to whichever industry it has the strongest position in.

Because this approach evaluates competitors within industries based upon their business strengths, it is an excellent planning tool. However, some assumptions have been made: (1) all industries are privatized (2) industry competitiveness is assumed for a specific point in time and (3) each industry is assumed to have high barriers to entry.

If firms decide to invest in new industries, they may need to restructure industries they are currently in to obtain the necessary funds.

Restructuring

Restructuring is changing the set of businesses that a firm has within its firm. Three primary vehicles accomplish restructuring: downsizing, downscoping and realignment. Downsizing will be addressed first.

Table 8.4 Downsizing Since 2007		
Rank	Firm	Number of Jobs Lost Since the Beginning of the Recession (2007)
1	General Motors	107,357
2	CitiGroup	73,056
3	Hewlett Packard	47,540
4	Circuit City	41,495
5	Merrill Lynch	40,650
6	Verizon Wireless	39,000
7	Pfizer	31,771
8	Merck	24,400
9	Lehman Brothers	23,340
10	Caterpillar	23,340
11	JP Morgan Chase	22,852
12	Starbucks	21,316
13	AT&T	18,401
14	Alcoa	17,655
15	Dow Chemical	17,530
16	DuPont	17,000
17	Berkshire Hathaway	16,900
18	Ford	15,912
19	KB Toys	15,100
20	USPS	15,000
21	DHL Express	14,900
22	Sun Microsystems	14,000
23	Boeing	13,715
24	Chrysler	13,672

*Source: * Challenger, Gray & Christmas. Dec. 2014.*

According to the U.S. government, between December 2007 (when the recession officially began and 2013) more than 8 million Americans have lost their jobs[43]. Of those job losses, 700,000 stem from layoffs at just 24 companies. These firms are listed in Table 8.4.

Certain industries figure prominently on this list. The auto industry, is estimated to have cut nearly 200,000 jobs in the U.S. since 2006[44].

A growing number of unemployed workers translates into slower sales of consumer products and the materials used to make them. Companies that turn commodities into finished products, such as Alcoa, DuPont and Dow Chemical, have felt the pressure of that shrinking spending[45]. Each have been squeezed as prices for their end products fell by more than the underlying prices of raw materials.

Downsizing occurs in many industries.

Downsizing is a planned reduction in the number of employees. The primary objective of downsizing is to reduce costs. If a firm is unprofitable, the first decision a firm may make is to implement a reduction in payroll across all businesses. This reduction is normally accomplished by laying off employees.

By engaging in across the board cuts, firms are not identifying which businesses are more profitable than others. Payroll reductions are an internal firm process. Very little is analyzed concerning the impact upon suppliers, customers, and competition. Care must be taken to engage in reductions while still meeting the needs of all the firm's stakeholders. Extensive cost cutting can result in low employee morale. Employees may be concerned that additional layoffs may eliminate them. Therefore, the remaining employees may decrease productivity because their primary focus may be upon finding another job.

The U.S. airline industry is a good example of downsizing. The more extensive the cuts, the more unprofitable the airlines become. Virtually all of the U.S. based airlines, with the exception of Southwest and Jet Blue, have had very significant manpower reductions.

On May 5, 2005 IBM reduced its workforce by between 10,000 and 13,000 employees[46]. With slow sales in Europe, IBM plans to realign its operating structure in Europe to reduce overhead.

The automotive industry continued to be hit hard by downsizing throughout the late 90's and in to the next decade. General Motors steadily reduced its workforce by eliminating thousands of jobs since 1995. Chrysler did not fare much better after the company's announcement to downsize beginning in 2007. The company announced an immediate plan to cut 13,000 jobs impacting multiple U.S. plants in an attempt to return to profitability in 2008.[47]

A number of company downsizing initiatives have occurred throughout the last several years both within the United States as well as globally. These include: Lowe's 2011 report to close multiple stores within the U.S. impacting 1,950 jobs and 20 stores across the country,[48] Verso Paper's 2011 report to downsize, reduce production, and cut 300 jobs citing the cost of rising raw materials and low industry demand,[49] and most recently, Blockbuster and PepsiCo. Blockbuster continues to have financial problems into 2012 and made About.coms list of worst retail news in 2009 after cutting more than 10,000 retail jobs and closing 960 stores.[50] PepsiCo issued news in February 2012 that it would be cutting 8,700 jobs, indicating higher raw materials as one of the determining factors in the company's move toward a cost cutting strategy.[51] Additional downsizing events include STMicro, a Swiss chipmaker, laid off 9 percent of its employees in 2014[52]. This reduction is a result of a declining demand for its products. Unilever, the primary competitor of Proctor & Gamble, plans to downsize its workforce by 20,000 workers by 2015[53]. Unilever's revenue is $50 billion compared to $77 billion for Proctor & Gamble. In addition, Unilever employs 179,000 workers which Proctor & Gamble employs 138,000 workers[54].

Pfizer is closing its R&D operations in the U.S. and cutting 2100 workers[55]. It will continue to outsource its R&D to Pacific Rim countries.
Downscoping is another form of restructuring.

Downscoping

Downscoping refers to the elimination of business units that are either unprofitable or not related to a firm's core competencies. Phillip Morris' divestment of Miller Brewing is an example. Phillip Morris' core business is tobacco. For some time, South African Brewers (SAB Miller) had desired to establish a position within North America. Their acquisition of Miller achieved this objective and allowed Phillip Morris to concentrate upon its core business of tobacco.

At times, a firm will attempt to downscope because a specific product line may not be generating acceptable returns. For example, Proctor & Gamble may sell off the Oral B division of Gillette because the division represents 15 percent of sales and 3 percent of net income. In addition, tooth care is not an area of strength for Gillette: its expertise is in blades and razors. Blades and razors account for 41 percent of the sales of Gillette and 68 percent of the profit. This is why P&G acquired Gillette.

Royal Dutch Shell is selling its Intergen NV power plant business to American International Group and Ontario Teachers' Pension Plan for $1.75 billion[56]. Shell is refocusing its business upon developing oil reserves. Adidas-Salomon is selling its sporting goods division to Amer Sports (Finland) for $624 million[57]. Adidas is re-focusing its attention to concentrate on sport shoes and apparel segments of the industry. Emmis Communications is selling its 16 television stations, which are valued at approximately $1 billion[58]. Emmis plans to use the funds to reduce debt and buy back stock. General Electric is selling its self-storage business to Prudential Financial and Extra Space Storage for $2.5 billion[59]. General Electric will use the funds from this sale to focus on its higher margin business segments.

The U.S. airlines have also engaged in downscoping. American Airlines has recently spun off its regional carrier, American Eagle[60]. This follows similar actions at Delta, Continental, Northwest and United of selling off regional carriers. The airlines logic is to concentrate on segments which generate profits[61].

Fujitsu has spun off its manufacturing of LSI chips as it exits the semiconductor business[62]. While Fujitsu makes hardware products including PC's, network equipment and components, the majority of its profits come from its software and consulting services[63].

Realignment

Realignment is another form of restructuring. Target Corp. is shutting down its money-losing operations in Canada, wiping out billions of dollars in investment to focus on reviving its sluggish U.S. business.[64] The reversal brings an end to the discount chain's first attempt to expand beyond the U.S. and a major misstep by what had been one of America's most successful retailers.[65]

Boeing and other defense contractors, such as Lockheed Martin Corp., have expanded their cyber offerings through dozens of small acquisitions over the past four years. The aim is to leverage their prowess in protecting the Pentagon and their own servers through deals with banks, retailers and others being targeted by cyber thieves.[66]

In 2013, Sears spun off its Land Ends business.[67] In addition, it significantly reduced its presence in Canada by closing stores.[68]

A group of hedge funds filed papers to push Caesars Entertainment Inc.'s largest unit into Chapter 11 bankruptcy, this represents a long-planned restructuring of the big casino operator.[69] The move comes shortly before the Las Vegas Company is due to place the unit, Caesars Entertainment Operating Co., into Chapter 11 bankruptcy with senior bondholders.[70] The casino operator wants to split the ailing gambling operation into a real-estate investment trust and a management company. Foes of Caesars' strategy want an independent outsider to review the proposal, in light of allegations that tainted deals drained billions of dollars of value from the firm.[71]

Microsoft Corp.'s had ended its agreement with Barnes & Noble, clearing the way for the largest U.S. bookstore chain to get on with its plans to spilt itself into two separate public companies.[72] Barnes & Noble said Thursday that it is buying out Microsoft's 16.8% stake in Nook Media LLC for about $125 in cash and common stock.[73] In return, Barnes & Noble committed to creating e-reading apps for new computers, phones and tablets powered by Microsoft's Windows software.[74]

Realignment refers to a substantial change in a firms' organizational structure. After reaching an agreement to acquire Compaq in September 2001, Hewlett Packard continued to experience organizational changes into 2005 when HP separated its PC business from other parts of the firm. Also in June 2005, Viacom decided to split into two firms. The split separated the company's cable channels and film studio from its broadcast television and radio operations. Viacom Inc. includes cable networks and entertainment (e.g. movies). CBS Corp. includes television, radio, outdoor advertising and one cable network (Showtime). Ford Motors Inc. has agreed to restructure its former partner, the auto parts maker Visteon, by spending between $1.6 and $1.8 billion to appeal to a more diverse customer base.

Aon Corp., the world's largest insurance broker has sold off two of its businesses. Its Combine Insurance Co. of America has been sold to Ace Limited for $2.4 billion[75]. Also, its Munich Re AG was sold for $352 million to Sterling Life Insurance. Aon believes these moves will allow it to re-focus on its brokerage and consulting business[76].

In 2008, Philip Morris created PMI as a standalone business from Philip Morris[77]. This move would free Philip Morris from litigation within the U. S. which has hindered growth. PMI would operate as an independent firm. It would be able to focus upon the growth markets within the tobacco industry: Brazil, Russia, India, and China[78].

Restructuring and the Capstone Simulation

Andrews has one product in each segment. All products with the exception of the high end product have positive net margins (Table 8.4: section b). Andrews' high end product has a negative net margin (46). Adam is only using 33 percent of its production capacity on its high end product (Table 8.6). This product is generating 97 units of inventory. Andrews may want to sell 900 units of first shift capacity of Adam's production capacity and use the funds to increase the capacity of its new product (Ate). Ate could be a successful new product in the high end segment. Andrews' size product (Agape) is only producing 62 percent of its capacity (Table 8.6). This product is well positioned within the size segment (inventory of 8 units) (Table 8.6). Andrews' traditional product (Able) and its low end product (Acre) are Andrews' most profitable products (Table 8.4: section b). These products are generating minimal inventory (Table 8.6). As such, capacity should be bought and automation should be increased.

Baldwin has one product in the traditional, low end, and size segments. It has two products in the high end segment and no products in the performance segment. Its traditional, low end, and one of its high end products are profitable. Baldwin is incurring minimal losses on its second high end product and its size product (Table 8.4: section b). Baldwin's low end product, Bead, has a strong position in the low end segment: minimal (150 units) of inventory. Since this is a price sensitive segment, Baldwin needs to increase its automation and add capacity after plant capacity exceeds 150 percent. The low end product is Baldwin's most profitable product (Table 8.4: section b). Baker (traditional product) is Baldwin's next most profitable product. Currently, Baker is running at 84 percent of production capacity. Baker is generating 217 units in inventory. Part of the reason may be because of its late revision date (Dec. 5). Baldwin needs to increase automation on this product line. Baldwin has two high end products (Bid, Bold). Bid is making money ($4502) and Bold is losing money ($351) (Table 8.4: section b). Bid product is generating inventory (114 units) and running its production line at 176 percent. Part of its problem with the inventory may be due to its revision date (Dec. 18). Bold has a much better position from a positioning perspective (89 units of inventory). This product is only running at 58 percent (Table 8.6). Capacity on this line needs to be increased. Baldwin's size product (Buddy) is losing money ($791) and generating significant inventory (103 units). In addition, this production line is only running at 50 percent. Baldwin should sell off this line and use the funds to focus upon the Baker, Bead, and Bid lines. As discussed above, all of these lines are profitable.

Chester has one product in each segment. All of its products are profitable. However, its traditional (Cake) and low end (Cedar) account for significantly greater profitability than do its high end (Cid) and size (Cure) products. Cid and Cure are significantly more profitable than its performance (Coat) product. Due to the relatively low inventory levels on all products, Chester may choose to increase the utilization of overtime on all lines. In order to increase capacity, Chester may want to sell off its performance production line. This is needed to increase automation on its traditional and low end product lines.

Digby has one product in each segment. All of Digby's products are profitable (Table 8.4: section b). Digby's traditional and low end account for most of the profit. Digby's traditional product, Daze, and its low end product, Dell, are well positioned in each segment as can be seen from the relatively low inventory levels on both products (Table 8.6). The Daze and Dell products are running at 24 percent and 31 percent overtime. Another reason to add capacity is because both of these segments are price sensitive. As such, achieving economies of scale is important. Along the same line, increasing automation on both lines will result in additional efficiencies. Capacity also needs to be added to the high end, performance, and size products to service market growth. Segment growth rates for the high end (16.2%), performance (19.8%) and size (18.3%) are significant (Table 8.5). Production capacity for Doom needs to be increased.

Erie has two products in the traditional segment, one product in the low end segment, and one product performance and size. Erie has no product in the high end segment. Erie has sold off its production capacity in the performance segment. Erie has put itself in a vulnerable position. Erie is exiting the \ market (Table 8.6) and is losing money on its size product (Table 8.4: section b). Erie is profitable on both of its traditional products and its low end product. However, Andrews, Baldwin, Chester, Ferris, and Digby are generating greater profitability on their low end lines (Table 8.4: section b). In the traditional line, Erie is generating sales of $39,095 and $32,050 (Table 8.4: section a). In addition, within the traditional and low end segments, Erie is generating relatively low inventory of these products (Eat, Echo, Ebb). This is not the case with respect to its size product (Egg). This product is losing money ($2776) and is poorly positioned. Erie must sell off its production capacity on this line. The funds need to be used to buy additional capacity in both the low and traditional lines. Erie needs to continue to buy capacity in both the Eat and Ebb lines. In addition, it is of crucial importance for Erie to totally automate both its traditional and low end production lines.

Erie must dominate both the traditional and low end market segments if it is going to stay as a viable competitor. Speed of decision making is crucial for Erie.

Ferris has one product in each segment. Ferris is making money on all products (Table 8.4: section b). As evidenced by minimal inventory on all product lines (Table 8.6), Ferris should remain in all segments. Ferris' capacity on the traditional and low end lines is too small. Ferris needs substantial increases in capacity in the traditional and low end lines. Since both of these lines support price sensitive products, it is crucial that Ferris increases this capacity to the level of Erie's traditional and low end lines. Ferris has a significant problem with its traditional line: this line is only automated to a level of 4.

This will not provide sufficient cost efficiencies in trying to compete with all other firms in this line. Although Ferris has an automation level of 6 on its low end (Feat) line, this is comparable to the other firms in the industry. However, the low end product is very cost sensitive. As such, automation needs to be increased significantly and as quickly as possible. Ferris' existing high end product, Fist, has a strong market position. Fox has the potential to take market share from Bid, and/or Dixie, and/or Cid. From Table 8.4: section b, we see that Andrews' high end product, Adam, is losing money. The second high end product of Baldwin(Bold) is losing money, and Erie has no product in the high end. All of Fox's 500 units of capacity should go into it in the high end. Table 8.7 summarizes the restructuring decisions for each team.

Table 8.4
Product Analysis
Section a
Sales ($)

Segment/Firm	Traditional	Low End	High End	Performance	Size
Andrews	39,758	32,270	11,727	15,986	8701
Baldwin	28,382	42,936	30,611, 10,402	None	8547
Chester	35,123	43,478	25,655	23,067	23,891
Digby	41,180	38,540	26,828	24,298	24,412
Erie	39,075 32,050	40,803	None	2639	2657
Ferris	32,401	32,454	26,835	23,434	25,153

Section b
Net Margin ($)

Segment/Firm	Traditional	Low End	High End	Performance	Size
Andrews	**8330**	**7836**	(46)	2525	1314
Baldwin	**4779**	**8469**	4502, **(351)**	None	(791)
Chester	5848	8984	3996	513	2596
Digby	**8118**	**8029**	3910	1484	2917
Erie	7762, 3023	7666	None	98	(2776)
Ferris	6496	4914	4192	1995	4050

Table 8.5
Market Segment Analysis

Traditional Market Segment	
Traditional Statistics	
Total Industry Unit Demand	**8809**
Actual Industry Unit Sales	**8809**
Segment % of Total Industry	30.4%
Growth Rate	9.2%
Low End Market Segment	
Low End Statistics	
Total Industry Unit Demand	**11,180**
Actual Industry Unit Sales	**11,180**
Segment % of Total Industry	38.6%
Growth Rate	11.7%
High End Market Segment	
High End Statistics	
Total Industry Unit Demand	3448
Actual Industry Unit Sales	3448
Segment % of Total Industry	11.9%
Growth Rate	**16.2%**
Performance Market Segment	
Performance Statistics	
Total Industry Unit Demand	2749
Actual Industry Unit Sales	2749
Segment % of Total Industry	9.5%
Growth Rate	**19.8%**
Size Market Segment	
Size Statistics	
Total Industry Unit Demand	2776
Actual Industry Unit Sales	2776
Segment % of Total Industry	9.6%
Growth Rate	**18.3%**

Table 8.6
PRODUCTION INORMATION

Name	Primary Segment	Units Sold	Units Inventory	Revision Date	Age Dec. 31	2^{nd} Shift & Overtime	Automation Next Round	Capacity Next Round	Plant Utiliz.
Able	Trad	1,446	69	5/7/2013	2.0	20%	5.0	1,200	120%
Acre	Low	1,501	104	1/29/2012	6.6	3%	7.0	1,400	103%
Adam	High	313	97	7/7/2013	1.6	0%	7.0	900	**33%**
Aft	Pfmn	477	7	3/3/2013	2.0	14%	4.0	400	114%
Agape	Size	260	8	11/28/2013	2.0	0%	4.0	400	62%
Ate		0	0		0.1	0%	7.0	400	0%
Baker	Trad	979	217	12/5/2013	1.8	0%	5.0	1,300	84%
Bead	Low	2,035	150	5/25/2007	6.6	45%	7.0	1,400	145%
Bid	High	785	114	12/18/2013	1.2	76%	3.0	600	176%
Bold	High	306	89	7/27/2013	1.7	0%	3.0	600	58%
Buddy	Size	251	103	9/18/2013	1.6	0%	3.0	650	50%
Cake	Trad	1,325	171	8/26/2013	1.9	39%	5.5	1,000	139%
Cedar	Low	2,230	172	1/29/2012	6.6	59%	7.5	1,450	159%
Cid	High	684	86	11/15/2013	1.3	7%	3.0	600	107%
Coat	Pfmn	710	46	11/3/2013	1.5	16%	4.0	600	116%
Cure	Size	735	66	9/10/2013	1.6	24%	4.0	600	124%
Daze	Trad	1,420	201	8/22/2013	1.8	24%	5.0	1,200	124%
Dell	Low	1,793	178	5/25/2007	6.6	31%	7.0	1,400	131%
Dixie	High	688	120	12/3/2013	1.2	39%	3.0	600	139%
Dot	Pfmn	715	12	11/13/2013	1.5	16%	3.0	600	116%
Dune	Size	718	73	11/13/2013	1.5	24%	3.0	650	124%
Doom		0	0	8/9/2014	0.0	0%	6.0	500	0%
Eat	Trad	1,447	224	4/8/2013	2.1	10%	7.0	1,400	110%
Ebb	Low	2,092	148	1/15/2013	6.6	50%	6.0	1,500	149%
Echo	High	1,187	125	7/20/2013	1.4	38%	5.0	900	138%
Edge	Pfmn	78	0	6/30/2009	4.5	99%	3.0	1	198%
Egg	Size	78	60	12/24/2013	2.3	0%	3.0	600	8%
Fast	Trad	1,117	254	4/22/2013	2.1	55%	4.0	800	155%
Feat	Low	1,475	54	7/26/2016	6.6	98%	6.0	700	198%
Fist	High	688	91	12/22/2013	1.2	39%	3.0	550	139%
Foam	Pfmn	689	54	11/11/2013	1.5	16%	4.0	600	116%
Fume	Size	740	73	11/9/2013	1.5	24%	4.0	600	124%
Fox		0	0	12/12/2013	0.0	0%	5.5	500	0%

Table 8.7
Restructuring Decisions

Andrews

- Sell off 33 percent capacity of Adam to fund growth in Ate (new product) and/or fund growth of its traditional (Able) or low end (Acre). Able and Acre generate the bulk of Andrew's profitability

Baldwin

- Sell all the buddy line except one unit of production capacity
- Use funds to further develop Baker (traditional) and (low end) Bead

Chester

- Sell off performance line
- Increase overtime utilization on traditional (Cake) and low end (Cedar) lines
- Increase automation level on Cake product line
- Utilize additional 2nd shift on traditional (Cake) and low end (Cedar) lines

Digby

- Increase overtime utilization on traditional (Daze) and low end (Dell) lines
- Automation levels on traditional and low end lines need to be increased
- Additional production line capacity for Doom (new product) needs to be increased

Erie

- Sell off production capacity on size line
- Increase overtime utilization of traditional (Eat) and low end (Ebb) lines.
- Increase automation in low and traditional lines

Ferris

- Increase overtime utilization on traditional (Fast) line.
- Buy additional plant capacity on low end product (Feat)
- Significantly increase automation on traditional and low end lines
- Increase capacity on Fox line to establish a larger position in the high end

Discussion Questions

1. Explain why performance varies for different types of acquisitions.

2. Do managers and shareholders view the relationship between diversification and risk similarly? Explain.

3. Which financial statement(s) should be examined when engaging in restructuring decisions? Explain.

4. Explain the G.E. matrix: which segments should the firm invest in? Which segments should the firm divest? Why?

5. Which restructuring process is recommended? Why?

6. How is a business strength assessment conducted?

7. Why is year ending cash flow important?

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General Electric Mini Case

General Electric is a multi-national firm holding a portfolio of firms in a number of industries. General Electric has significant holdings in (1) oil and gas (2) power & water (3) healthcare (4) transportation and (5) aviation. Table 1 overviews General Electric's financial data.

Table 1
Recent General Financial Data

Year	**2014**	**2013**	**2012**
Revenue ($ billions)	76.568	71.873	72.991
Net Income ($ billions)	15.233	13.057	13.691
EPS	1.51	1.47	1.38

General Electric's net income and EPS have been steadily increasing. In 2013, General Electric acquired the Italian aviation firm AVIO for $4.3 billion.

Discussion Question:

1. Was this a positive or negative acquisition for G.E.?

Chapter 9

Growth Via Strategic Alliances

Learning and Assessment Goals

1. Understand key factors to consider in strategic alliance formation.

2. Understand how strategic alliances can be modes of domestic and international growth.

3. Understand the different types of strategic alliances and the benefits each type can generate.

4. Understand the role that joint ventures play in firm growth.

5. Develop an understanding of the downside of strategic alliances.

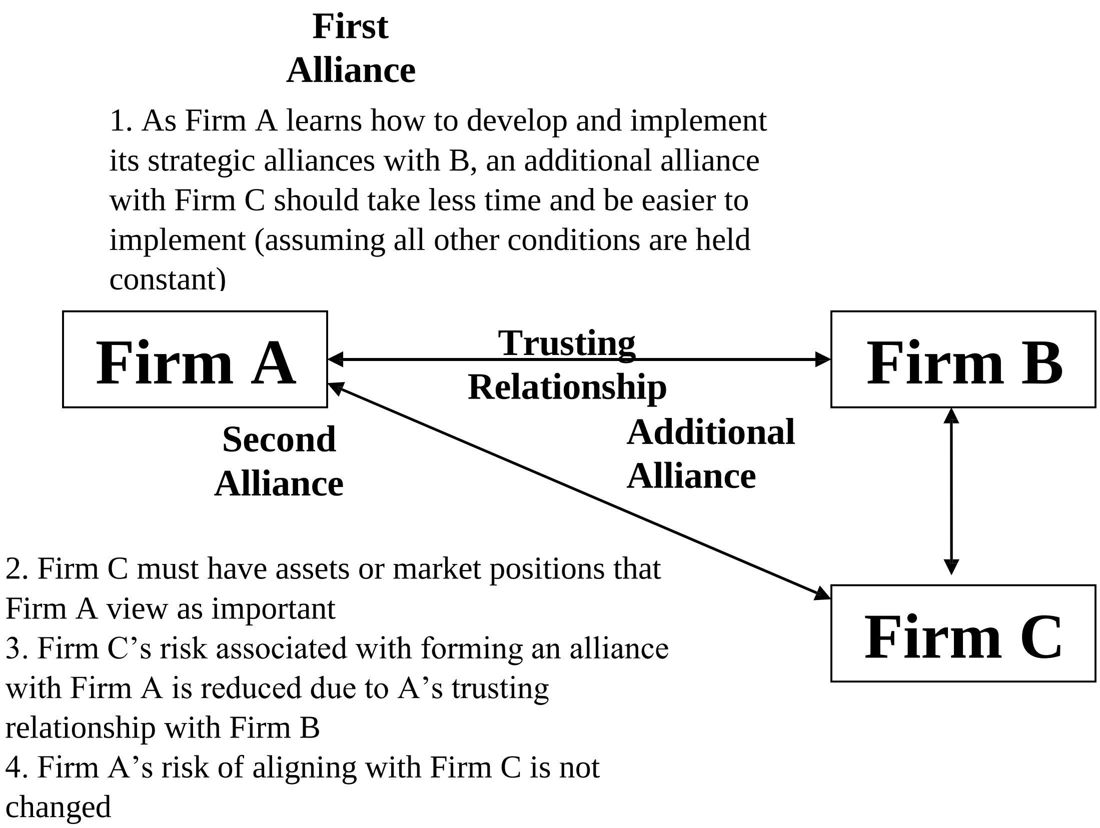
Strategic alliances are agreements among firms in which each commits resources to achieve a common set of objectives. Strategic alliances result when firms agree to share resources for R&D, manufacturing, and/or distribution. Companies may form strategic alliances with a wide variety of players: customers, suppliers, universities or divisions of government. Through strategic alliances, companies can improve competitive positioning, gain entry to new markets, supplement critical skills and share the risk or cost of major development projects.

To form a strategic alliance, companies should: (1) define their business vision and strategy in order to understand how an alliance fits their objectives, (2) evaluate and select potential partners based on the level of synergy and the ability of the firms to work together, (3) develop a working relationship and mutual recognition of opportunities with the prospective partner, (4) negotiate and implement a formal agreement that includes systems to monitor performance[4].

Strategic alliances are formed for many reasons. Some rationales are to: (1) reduce costs through economies of scale or increase knowledge, (2) increase access to new technology, (3) inhibit competitors, (4) enter new markets, (5) reduce cycle time.

One benefit of strategic alliances is that the firm does not need to invest significant capital to engage in them. A second benefit is that strategic alliances may result in quicker growth than internal development. A third benefit is that it is easier to withdraw from alliances as opposed to acquisitions or internal development. With acquisitions the firm must divest businesses, which can be time-consuming. With internal development, this type of growth may have become an integral part of the firm and may not be divestible. Figure 9.1, on the next page, discusses strategic alliance formations.

Figure 9.1
Key Factors to Consider in Strategic Alliance Formation



An Integrated strategic alliance network is based upon several criteria. Trust is probably the most important.

Trust

No one firm can create all of its resources to be competitive over time. Pressures from globalization along with changes in regulation and technological factors have resulted in firms reaching out to partners to access their complementary capabilities. A key consideration in alliance formation is the relationship between alliance partners. Trust between partners is fundamental to sustaining alliances[1].

In many cases, firms will not enter into alliance relationships unless they feel that they can trust their partners and/or partners have established a reputation of trustworthiness. In 2006, Capitaland's alliance with Walmart to open up its new malls in China showed the trust each firm had with the other. These partners have agreed to open up 17 new malls in China in 2007.

Assume that Firm A and Firm B enter into an alliance. The alliance will continue until both firms are receiving benefits which they could not have attained working alone. For example, Firm A may benefit from the distribution infrastructure of Firm B, while Firm B may benefit from economies of scale and/or economies of scope.

As Firm A and Firm B develop their alliance over time both firms may be more comfortable sharing other types of resources. Additional alliances between Firm A and Firm B may be easier and quicker to implement.

Scale of Coverage

As firms observe the development of alliances between Firm A and Firm B, Firm C may become interested in obtaining an alliance with Firm A and/or Firm B. As this process occurs over time, firms develop alliance networks which could be beneficial to all members of the network. This network can allow each firm the opportunity to tap into its partners' resources which may serve as a source of sustained competitive advantage[2].

In addition, prior alliance experience is important in being able to build and utilize routines and mechanisms to build alliance networks[3]. A firm's alliance opportunities are likely to be related to its possession of resources. The number of potential partners that are willing to align with a firm is a function of the firm's attractiveness to other firms[4]. A firm's attractiveness to potential partners, in turn, depends on the value that it can add to them. The value that a firm can provide to its partners will occur when a firm can make available assets that are difficult for the partners to create on their own. The greater a firm's stock of resources, the greater the firm's attractiveness to partners, and the greater the firm's collaboration opportunities[5]. However, firms willing to share their resources are likely to demand assets from their partners that go beyond the financial assets they can obtain at the going rates from the capital market[6].

All alliance partners are linked to other alliance partners within the same network. The position of the network and the quality of its ties with others allows firms to access the resources and capabilities of others within the network[7]. Alliances that generate advantage are characterized by: creation of relationship-specific assets, access to complementary capabilities, and substantial flow of knowledge between the partners[8]. Research evidence on alliances suggests that such characteristics of partnerships are systematically created by firms not only through careful selection of partners, but also through deliberate investment in these features.

Relationship-Specific Assets

The term relationship-specific assets refers to the assets of a partner that are customized to the relationship with another partner, so that the combination of assets is idiosyncratic. Such customization would create some barriers to imitation by competitors.

Complementary Capabilities

Complementary capabilities is similar to the concept of co-specialized assets[9]. One example of complementary capabilities is when pharmaceutical firms combine R&D operations. In addition, reputation and prior experience play an important role in partner assessment[10].

Interfirm Knowledge Sharing

Interfirm knowledge sharing is defined as a regular pattern of firm-level interactions that permit the transfer, recombination, or creation of knowledge[11]. A firm's ability to absorb knowledge from a partner depends on prior related knowledge or "absorptive capacity"[12]. Cohen and Levinthal (1990) define absorptive capacity as the firm's ability to recognize and assimilate new knowledge and then apply it to commercial ends. As each firm interfaces more with its partners, greater knowledge is transferred between partners. When American Airlines entered the One World Airline alliance, it made available to all partners its reservation system which was viewed as one of the best in the world.

There are two general types of strategic alliances. Scale alliances are partnerships in which partners contribute similar resources[13]. Link alliances are partnerships in which firms contribute different resources[14]. Table 8.1 identifies the possible positive ramifications of alliance formation.

Table 9.1
Ramifications of Alliance Formation

Scale Alliances	Link Alliances
• Economics of scale • Expansion into new markets • Expansion into restricted markets • Building international networks	• Economics of scope • Developing new products/services • Obtaining new resources • Increase rate of learning • Transfer of technology • Obtaining value chain benefits

Scale Alliances

Scale alliances will be discussed first. Scale alliances can result in **economies of scale**. Economies of scale are improvements in efficiency as a result of increasing utilization of assets. Airlines are examples of firms that utilize scale alliances to generate economies of scale by increasing the number of passengers per flight. There are three major international airline alliances that provide alliance partners with global coverage. Table 9.2 identifies the partners in the three major airline alliances.

Table 9.2 Global Airline Alliances (2012)		
Star	**OneWorld**	**Skyteam**
Adria	American Airlines	Aeroflot
Aegean	British Airways	Aeromexico
Air Canada	Cathay Pacific	Air Europa
Air China	Finnair	Air France
Air New Zealand	Iberia	Alitalia
ANA	Japan Airlines (JAL)	China Eastern
Asiana Airlines	LAN	China Southern
Austrian	Malev	Czech Airlines
Blue1	Mexicana	Delta Airlines
British Midland International	Qantas	Kenya Airways
Brussels Airlines	Royal Jordanian	Tarom
Croatia Airlines	S7 Airlines	Vietnam Airlines
Egyptair	Airbelin Airlines	Korean Airlines
LOT Polish Airlines		
Lufthansa		
Scandinavian Airlines		
Singapore Airlines		
South African Airways		
Spanair		
Swiss		
TAM		
Tap Portugal		
Thai		
Turkish Airlines		
United/Continental		
Ethiopian Airlines		

An alliance can take one of two generic forms. In a scale alliance, firms combine similar resources. A scale alliance permit partners to **expand into new markets**. One benefit of alliances of this type is they provide for expansion at minimal costs. Scale alliances can also be utilized to expand into new markets without incurring acquisition costs or the risks associated with foreign direct investment. In 2014, Coca-Cola Co. and U.K. brewer SABMiller PLC combined soft-drink bottling operations in southern and eastern Africa. This deal reflects both companies' efforts to broaden their beverage offerings into new markets.[15] Anheuser Busch has formed an alliance with Tsingtao, China's leading brewer. This alliance provides Anheuser Busch with access to the second largest (following the United States) beer market in the world.

Kansas City Southern Railway has entered into a strategic alliance with Mi-Jack to obtain access to the Panama Canal. This alliance has created an ocean-to-ocean transshipment service between the Atlantic and Pacific oceans on a railway that runs parallel to the Panama Canal[16]. This railway serves as an important link between European, North American, and Asian markets.

Scale alliances allow firms to **enter restricted markets** that may not otherwise be accessible. In some markets, acquisitions and direct investment are not permitted. Thus, strategic alliances allow firms to grow into international markets from which they had been previously restricted. Often international acquisitions are restricted because of government policy. Russia's oil and natural gas industry is state owned. BP PLC (Great Britain) had an alliance with TNK (Russia), which has permitted BP to develop the oil and gas industry within Russia[17].

Another benefit of scale alliances is that **international networks can be developed**. Caterpillar has formed an alliance with Mitsubishi to manufacture heavy equipment machinery to enter Pacific Rim markets. The alliance is important because it gives Caterpillar a position in its primary competitor's (Komatsu) home market. As shown in Table 9.2, airlines can build **international networks** quickly. General Motors has strategic alliances with many other global auto manufacturers (Saab, Suzuki, Isuzu, Toyota) to help build its international network[18].

Link Alliances

Link alliance occur when firms share different resources. Link alliances have many benefits. One benefit is **economies of scope**.

Economies of scope are cost savings that the firm creates by successfully transferring some of its capabilities and competencies that were developed in one of its businesses to its other businesses. Burlington Northern Santa Fe Railroad has an alliance with Swift Transportation (trucking) to offer intermodal services for domestic and international shipments[19]. Intermodal services utilize more than one mode of transportation. By utilizing railroads, trucking firms can reduce costs. Rail carriers benefit by having greater access to markets. DHL Worldwide and Lufthansa AG (Germany) entered into a strategic alliance to achieve economies of scope. Lufthansa utilized DHL ground infrastructure (e.g. trucks) to provide for pickup and delivery of freight[20]. DHL utilized Lufthansa for the air transportation of its shipments[21]. Intel and Google developed an alliance to create new workplaces designs in 2014.[22]

At times, firms will enter into alliances to obtain access to **new products or services**. Sanofi and Regeneron Inc. have created a new class of LDL reducers[23]. This follows the introduction of Amgen and Pfizer creating a similar type of drug.[24] Roche AG and GlaxoSmithKline PLC have an alliance for the development, marketing, and distribution of a once-a-month osteoporosis pill, Boniva. The global market for this pill is estimated at $5.7 billion[25]. Roche developed the drug and entered into the alliance with GlaxoSmithKline to market and distribute the drug. Glaxo's sales force is much larger and more dispersed worldwide than Roche's[26]. In addition, Glaxo's sales force has established relationships with doctors who treat osteoporosis patents.

Monsanto Co. has teamed up with Genaissance Pharmaceutical and the U.S. Government to map the genetic code of soybeans. The hope is to supply farmers with technology that makes the crops more resistant to disease and drought[27]. General Motors and DaimlerChrysler have alliances with the

Department of Energy to develop hydrogen fuel cells for cars[28]. Novartis AG and Schering have created a link alliance to develop a new drug, PTK/XK, which treats colorectal cancer[29]. Many cancer drugs kill both cancerous and healthy cells[30]. This is one of the few cancer medicines that focus on cancer cells only.

Siemens has an alliance with Ejoala AG, a German fashion retailer, to design and market cell phones that are fashionable. This venture is an attempt to differentiate cell phones from a customization perspective[31]. Samsung Electronics has also introduced a fashion cell phone as a result of an alliance with designer Ann Sui[32].

Link alliances allow partners **access to new resources**. In 2014, Teijin (Japan) and Airbus developed a new, lightest weight carbon fiber to build new aircraft[33]. Hewlett-Packard has alliances that provide the firm with new resources in software (Microsoft), chip technology (Intel), and systems integration resources (Accenture, BearingPoint)[34].

Emerson's alliance with Shell Philippines has provided Shell with technology capabilities for extracting natural gas deposits and gives Emerson a market presence along the Pacific Rim[35].

By combining different resources, firms can **increase their rate of learning**.

Corning has a link alliance with Cisco where it shares its expertise in optics and photonics with Cisco to build Internet-scale optical networks. This learning enables cable and DSL providers to install optical infrastructures faster and cheaper[36].

Boeing and Airbus have increased their rate of learning with respect to aircraft manufacturing processes. United Technologies is manufacturing cabin air conditioning and temperature control systems for the new Airbus A380 and Boeing 787[37]. Jamco Corp. of Japan is providing Airbus access to ways of producing key structural elements obtained from advanced composite materials[38]. DaimlerChrysler AG has partnered with European Aeronautic Defense and Space Program (an owner of Airbus) to learn new production processes[39].

It is possible that unwanted **technology transfer** could occur from link alliances. The key to preventing technology transfer is to develop long-term relationships with respect to alliance partners. Kodak and Samsung Electronics have formed a link alliance to sell consumers inkjet printers in Europe. Samsung will sell Samsung inkjet printers using Kodak's printer and proprietary ink technology. The printers recently launched in Germany[40].

Motorola entered into a link alliance with In-Focus. The goal of the link alliance was to build video display panels incorporating In-Focus technology[41]. In-Focus got the capital it needed, a key customer, and access to Motorola's international distribution manufacturing capabilities. Motorola locked in a strategic technology that it was unable to develop internally[42]. The technology permits Motorola to leapfrog past rival Japanese competitors.

Technology transfer is common in Japan because of the strong partnership relationships that exist among firms within and across industries[43]. For example, Japanese aircraft technology has been applied to numerous industries. The process called "spin-off" includes (1) production control technologies for electronic products, (2) design technologies for ships and automotive vehicles, and (3) manufacturing technologies for industrial products, hydraulic equipment, and electronics[44].

The transfer of technology in link alliances implies that one firm could receive greater benefits than its partner(s). In some cases both firms may benefit. The NUMMI alliance between General Motors and Toyota is an example of technology transfer benefiting both partners. General Motors obtained access to Toyota's manufacturing processes. Toyota learned how to utilize technology to run a manufacturing operation in the United States[45].

Royal Dutch Shell has an alliance with Kuwait Petroleum to explore opportunities within the downstream value chain[46]. Shell provides its technology experience and Kuwait Petroleum supplies oil for refining[47].

China is requiring the three bidders for its four nuclear reactors (valued at $2 billion eac agree to technology transfer before it awards the contract[48]. The three bidders--British Nuclear Fuels

PLC, Areva SA (France), and Siemens (Germany)--must agree to assist making China self-sufficient from an energy perspective by transferring technology and teaching China how to make nuclear reactors for peaceful purposes.

Sometimes alliances are formed to **obtain value chain benefits** that each firm is lacking. The DHL alliance with the United States Postal Service (USPS) allows DHL to expand its U.S. infrastructure network. This alliance is especially valuable since DHL acquired Airborne in 2003. By expanding its infrastructure, DHL is able to compete more effectively on costs with United Parcel Service (UPS) and FedEx. This alliance gives USPS access to DHL's extensive global infrastructure. The Air Transport Association of America (ATA) and the US Defense Logistics Agency's Defense Energy Support Center (DESC) signed a link alliance in 2014 to advance the development and deployment of commercially viable, environmentally friendly, alternative aviation fuels[49]. The partners will aim to leverage their collective purchasing power to encourage suppliers to bring commercial aviation alternative fuels into the marketplace. Collaborative teams composed of ATA and DESC representatives will be formed to foucs on three areas: Environment, Deployment and Logistics, and Contracting and Finance.

Several rental car firms are using large retailers to focus upon distribution of rental cars. Wal-Mart has alliances with Budget, Thrifty, and Enterprise[50]. Sears has a link alliance with Avis[51]. These alliances increase Wal-Mart and Sears' offering in non- traditional segments. The rental car firms increase coverage to locations other than airport.

Joint Ventures

A joint venture is a form of strategic alliance in which two or more firms create a legally independent company to share resources to develop a competitive advantage.

Joint ventures provide a way to temporarily combine the different strengths of partners to achieve an outcome of value to both.

Joint ventures can occur between (1) domestic firms (2) one domestic firm and one international firms or (3) between international firms.

In 2014, Boeing established a joint venture with Toray industries to use lightweight strong carbon fiber to build a new version of the Boeing 777 aircraft.[52] Boeing invested $2.6 billion and Toray provided the materials.

Boeing and Toray also agreed to work together to increase the aerospace applications of carbon fiber. This material that has replaced metals in some parts of aircraft construction, reducing weight, fuel consumption and operating costs.[53]

Not to be outdone, Airbus agreed to a joint venture with Teijin LTD (Japan) to create its own carbon fibers for its aircraft.[54] The drug industry has a large number of joint ventures. A new class of LDL reducers called PCSK9s[55] are being developed by joint ventures between Sanofi SA and Regeneron Pharmaceuticals Inc. and by Amegen Inc. and Pfizer.[56]

Joint ventures can be used to strengthen a firms secondary products. Coke is paying $260 million for the SABMiller's Appletiser, a carbonated apple juice, and the rights to another 19 nonalcoholic brands in Africa and Latin America.[57]

Coke has been diversifying beyond its core soda brands of Coke, Sprite and Fanta as more consumers shift to waters and juices. In the U.S. in 2014, Coke moved to acquire minority stakes in energy-drink maker Monster Beverage Corp. and Keurig Green Mountain Inc, a maker of countertop coffee machines.

For SABMiller, whose beer brands include Peroni, Grolsch and Miller Genuine Draft, the deal with Coke marks a further step beyond its core brewing business. Soft drinks now make up 20.6% of SABMiller's total sales by volume, compared with 17.2% in 2009.[58]

The shift reflects in part stronger growth for nonalcoholic drinks. Soft drinks grew at an annual rate of 5 times that of beer.[59]

At times, joint ventures can be used to integrate complementary assets. Marriott's 2014 joint venture with Ian Schrager shows how big hotel brands increasingly are teaming up with fashion houses, musicians, and hotels to broaden their customer base.[60]

Sony will set up two joint ventures in 2015 to make and market PlayStation consoles and games in China. One venture will be responsible for the PlayStation's hardware, while the other will be focused on software with Sony's partner in China, the Shanghai Oriental Pearol Group.

Sony said that the company hoped to increase sales of the PlayStation 4 console, turning it into a main driver of the company's fast-growing network and streaming services business. Sony believes that this would spur interest across Sony's product categories.[61]

Sony's move comes after Microsoft and its joint-venture partner, BesTV New Media, announced in 2014 they would introduce Microsoft's Xbox One game console in China.[62]

Toshiba Corp said it had signed an agreement in 2014 with United Technologies Corp to strengthen strategic collaboration through their joint venture, Toshiba Carrier Corp, which develops air-conditioning equipment.[63] The deal will expand the venture's engineering and sales resources outside Japan and establish engineering centers in the United States.

Twenty-First Century Fox and Apollo Global Management LLC agreed to combine three of their TV production companies behind hit shows such as "Big Brother", "American Idol" and "Masterchef" under one group. The companies said they would set up a joint venture in 2015 to join Apollo-controlled Endemol and Core Media and Fox's Shine Group.[64]

Japan's SoftBank Corp said it is taking a minority stake in privately-held Legendary Entertainment for $250 million and will form a joint venture with the Hollywood movie studio. In 2013 investing in Legendary gave SoftBank access to Hollywood films and television shows and also broadened the reach of the Japanese company.[65]

In 2014, precious metals miner Fresnillo Plc said it would buy Newmont Mining Corp's 44 percent stake in their Mexico joint venture mines for $450 million in cash, increasing its position in gold mining in the country.[66]

South Africa's MTN has agreed to form a joint venture with specialist tower company HIS. This company will own and operate MTN's 9,151 transmitter towers in Nigeria.[67]

A Zimbabwe- Russia joint venture company, Ruschrome Mining, plans to invest $1.6 billion in developing a platinum mine and constructing a smelter and refinery in the African state.[68]

G.S. Yaasa (Russia) stated that it will develop a joint venture with U.S. auto markets to develop and sell lithium-ion batteries for electronic cars.[69]

Tata AutoComp Systems Limited (Tata AutoComp) and Katcon Global have signed a 50:50 joint venture agreement to make exhaust systems and emission after-treatment systems to enter into the Indian automotive industry in 2014.[70]

Hitachi and ABD will take equity interests of 51 per cent and 49 per cent respectively in the joint venture to set up a power grid in 2015.[71]

Russia's second largest oil producer, Rosneft, said it has signed an agreement with Italy's Finmeccanica and state defense conglomerate Rostec to build AW189 helicopters in Russia. As part of the agreement, the companies will establish a joint venture between the Russian Helicopters holding company and AgustaWestland, which are subsidiaries of Rostec and Finmeccanica respectively.[72]

Petrochina Co., an oil and natural gas producer, has a joint venture with China National Petroleum Corp. to expand operations outside of China[73]. China National Petroleum Corp. has over 30 oil and gas investments outside of China. Las Vegas Sands and Hong Kong's Regal Hotels International have a joint venture to develop hotel/casinos in the Hong Kong area. Las Vegas Sands will lease and manage the casinos while Regal Hotels will build the complex[74]. In 2004, the Virgin Group, headed by Richard Branson, and Mojave Aerospace Ventures, led by Paul Allen, entered into a joint venture to develop and test a reusable space vehicle. During 2004, the vehicle was successfully launched to an altitude of 62 miles[75]. The venture, Virgin Galactic, is scheduled to begin business in 2007 to transport tourists into space. Seats on the vehicle are expected to cost between $100,000 and $200,000 each[76].

Joint ventures can result in new products. Paris-based retailer GroupeDanone is introducing new products for the Chinese market. Its joint venture with Hangzhou Wanaha Group, China's largest beverage company, focuses upon introducing healthy beverages targeting urban consumers[77]. The new product, Nutri-Express, represents an attempt to change Wahana's position from a mass producer of beverages for children to target beverages for adults.

Sony has formed a joint venture with Toyota Industries Corp., a Japanese machinery maker, to produce liquid crystals for digital cameras and camcorders[78]. This venture, St. Morice Display, is an attempt by Sony to improve its electronics position in Japan[79].

Ryder has a joint venture with Toyota Tsusho America, a Toyota group company that provides iron, steel, and textiles to automobile manufacturers. The venture, TTR Logistics, has Toyota Tsusho providing the materials and Ryder managing the flow and warehousing of raw materials.

Samsung Corning Precise is a joint venture that develops and manufactures high quality glass substrates. This joint venture has created several new manufacturing processes[80].

In 2000, Transplace.com (TPC) was created. TPC is an Internet-based global transportation logistics company. TPC includes substantially all of the logistics business of the following transportation carriers: Covenant Transport, Swift Transportation Co, U.S. Xpress Enterprises, and Werner Enterprises[81].

In 2002, Sony and Ericsson created a joint venture by merging their mobile phone businesses[82]. The new venture, Sony Ericsson Mobile Communications, is equally owned (50 percent) by both partners. Both partners believe that this joint venture will increase their share of the international mobile phone market. In 2005, this joint venture established a partnership with the Women's Tennis Association (WTA) that made Sony Ericsson Mobile Communications the worldwide title sponsor of the Women's Tennis Tour. Under the terms of the deal, the WTA Tour will be renamed the Sony Ericsson WTA Tour, and both firms will enjoy a significant on-course presence in the hundreds of televised matches around the world.

In 2004, Comcast and Microsoft established a joint venture that used Microsoft's "Foundation" software for digital cable[83]. This venture is one of Microsoft's attempts to enter home entertainment. The Foundation software works like an operating system for set-top boxes in the same way Windows is an operating system for personal computers. Once it is installed, new features can be added to the cable box similar to the way software can be added to PCs[84].

On March 4, 2005, Hon Hai Precision Industry Co, one of the world's biggest contract manufacturers of electronics, entered into a joint venture with Hewlett-Packard for new product development[85]. Hon Hai is competing against Flextronics International Ltd. to be the world's biggest producer of electronics goods from a supplier perspective. Hon Hai surpassed Flextronics International Ltd. in 2004 as the world's biggest contract manufacturer of electronics goods. Hon Hai makes computers, mobile phones and other products for companies including Apple Computer Inc. and Sony Corp[86].

In 2005, Yahoo and Verizon Communication announced plans to offer an Internet portal service to Verizon customers. The Verizon agreement helps further Yahoo's efforts to generate additional revenue and could attract new users to Yahoo from other rival Internet services[87]. The benefit to Verizon is offering value-added services to its customers.

With the significant benefits offered by strategic alliances and joint ventures, one would wonder why all firms do not engage in developing alliances. The reason is that some alliances have negative ramifications.

The Downside of Strategic Alliances and Joint Ventures

One negative aspect of strategic alliances is that some partners have more to lose than others. Novartis AG has provided $375 million to Vectura Group PLC and Arakis Ltd. to develop a drug for smoker's lung disease[88]. Novartis is willing to pay substantial costs to attempt to develop a new product by combining the technology capabilities of these two firms. Vectura and Arakis will receive royalties if the product is commercialized. If the new drug fails, the firms have no financial commitment to Novartis AG[89]. The funds represent a sunk cost for Novartis AG.

At other times, strategic alliances may lead to an unwanted acquisition. In 2004, TCL Communications Technology Holdings and Alcatel SA formed a joint venture to achieve a stronger position within the cell phone industry. Subsequently, TCL Communications hostilely acquired Alcatel[90].

Unwanted technology transfer is another downside of alliances. Broadcom Corporation is suing Qualcomm Inc., Texas Instruments, and Maxim Integration Products, Inc. for patent infringements. Broadcom specializes in the manufacturing of chips for various segments of the communication industry.

Strategic alliances can also result in costs to end an alliance. On February 14, 2005, General Motors agreed to pay Fiat $1.99 billion to end their alliance[91]. The agreement preserves GM's access to Fiat technology that GM believes it can use in improving its unprofitable European operations[92]. For Fiat, the agreement provides much needed funds.

Strategic Alliances and the Recession

During the economic recession (2007-2010) the overall formation of strategic alliances decreased by approximately 40 percent[93]. The focus of many firms during the global recession was survival. The formation of strategic alliances is more oriented toward long term growth opportunities rather than attempting to stay in business.

Higher risk may be another factor as to why firms decided not to aggressively pursue strategic alliances[94].

As stated by Harbir Singh, Wharton strategy professor, "You would say that alliance and network capability is secondary to the core focus of the firm. …Really, what it comes down to is the tension between creating shared resources versus protecting one's own resources."

Only a third of the respondents to a recent study conducted by Ernest and Young felt that the recent recession was a good time to attempt to engage in strategic alliances[95].

If firms are to prosper after the global recession, strategic alliances will be part of a firm's growth strategy. Organizations grapple with how to build external networks – what Singh calls "the extended enterprise"-without shifting too much focus away from the core needs of the firm. "In order to be successful in the extended enterprise world, you have to invest in alliances and network capabilities," Singh said. Singh suggest that what firms need are "innovation networks." An "innovation network" is a web of people, institutions, or companies outside of a firm that helps it solve problems or come up with new ideas. While organizations have formed alliances and strategic partnerships for years, experts say this web of connections is becoming increasingly important today.

In terms of looking post-recession, executives were pretty evenly split between expanding into new geographies, increased use of strategic alliances, acquisitions, speed to market and divesting non-core business[96]. "Companies that maintain a sustainable business model through the current downturn will not only survive the downturn, but will emerge stronger and in the best position to take advantage of new growth opportunities as the economy improves," stated a senior consultant of Ernst & Young LLP.

From a strategic alliance perspective, opportunities in the areas of energy, agriculture, mining, pharmaceuticals, infrastructure and construction were highlighted as the ones where strategic alliances may be either developed or expanded.

At a summit that took place in Brazil in 2010, government representatives from the BRIC (Brazil, Russia, India, China) countries concluded that they needed a more closely linked network as the global economic recession was ending (2010). Strategic alliances representative between the BRIC markets, Argentina, Paraguay, and Uruguay were invited to participate in alliance formation with the BRIC markets. The BRIC position indicated that the four countries will coordinate their standpoints, strengthen unity and face financial crisis together to take the lead in economic recovery. As the global recession was ending in 2010, China and India both displayed good momentum in economic growth. Russia and Brazil also were recovering fast[97].

These countries are now better positioned to increase the scope and size of strategic alliances as the global recessions ends. Strategic alliances formation may be a crucial link in moving these emerging markets into fully developed markets.

The Future of Strategic Alliances

Alliances are beginning to account for a significant percent of a firm’s revenue[98]. Many senior level executives view strategic alliances as a primary means of growth[99]. Alliances provide for a quick way to grow and have the potential to provide firms both cost and differentiation advantages. While scale alliances primarily increase scale of operations, link alliances can provide firms access to new resources and capabilities. As firms learn from alliances, they make better decisions with respect to future alliance partners. Firms will continue to engage in strategic alliances as a primary mode of growth as long as trust exists between partners. Firms that are viewed as trustworthy can obtain an advantage from the perspective of entering into future strategic alliances[100]. As firms build an alliance network and engage in trusting behavior, potential alliance partners will perceive these firms as good alliance partners. As such, firms that have a reputation of trust will have many more opportunities to engage in additional alliances than firms who do not. In addition, as firms gain experience, they will be viewed more positively because of their experience with respect to alliance formation.

Strategic Alliances and Capstone Simulation

While strategic alliances are not currently incorporated into the Capstone simulation they could and this section discusses how they could be incorporated. The discussion assumes that products are somewhat standardized and production lines can manufacture only one product.

Table 9.3
Production Schedule

Name	Primary Segment	Units Sold	Unit Inventory	Revision Date	2nd Shift & Overtime	Automation Next Round	Capacity Next Round	Plant Utiliz.
Baker	Trad	979	217	12/5/2013	0%	5.0	1,300	**84%**
Bead	Low	2,035	150	5/25/2007	46%	7.0	1,400	145%
Bid	High	785	114	12/18/2013	78%	3.0	600	176%
Bold	High	306	89	7/27/2013	0%	3.0	600	58%
Buddy	Size	251	103	9/18/2013	0%	3.0	650	**50%**
Cake	Trad	1,325	171	8/26/2013	**40%**	5.5	1,000	**140%**
Cedar	Low	2,230	172	1/29/2012	61%	7.5	1,450	159%
Cid	High	684	86	11/15/2013	8%	3.0	600	107%
Coat	Pfmn	710	46	11/3/2013	17%	4.0	600	116%
Cure	Size	735	66	9/10/2013	**25%**	4.0	600	**125%**

It may be beneficial for Baldwin and Chester to form an alliance. A scale alliance would benefit both firms. Cure is running 25 percent overtime on this line and Buddy is only utilizing 50 percent of its production capacity. If Cure would run 25 percent of its production on the Buddy line, it would not be incurring any overtime. It would be running at 100 percent. By taking 25 percent of Cure's size units on its Buddy line, Buddy would increase its utilization from approximately 50 to 75 percent. Buddy would be generating lower unit costs because of the increased volume it is producing.

Additional scale alliances may also result in lower costs for both firms. Cake (traditional) product line is running at 40 percent overtime. If 16 percent of Cake's product were running on Baker's traditional line, Baker could increase its capacity to 100 percent, and Cake's overtime would be reduced by 16 percent. By both firms' sharing product lines economies of scale would be resulting for the Baker and Buddy line. Cake and Cure would reduce the cost of overtime.

From a financial perspective, we need to examine product line profitability. Listed in Table 9.4 are the net margins for Baldwin and Chester's products.

Table 9.4		
Net Margin by Product		
Baldwin		
Segment	Product	Net Margin
Traditional	Baker	**$4779**
Low End	Bead	$8489
High End	Bid	$4502
Performance	Bold	($351)
Size	Buddy	**($791)**
Chester		
Segment	Product	Net Margin
Traditional	Cake	$5848
Low End	Cedar	$8984
High End	Cid	$3996
Performance	Coat	$513
Size	Cure	$2596

By moving 25 percent from the Chester size line (Cure) to the Baldwin size line (Buddy), Buddy may become a profitable product and Chester's size line (Cure) may generate higher net margin than it currently is ($2596). In addition, both firm's traditional product lines, Baker and Cake, could be generating higher net margins than they currently are as a result of the scale alliance

In addition to scale alliances, the Capstone simulation could incorporate link alliances. Table 9.5 (section a) shows the high end statistics; (section b) identifies the high end customer buying criteria; (section c) identifies the top product in the high end segment.

Table 9.5 Section a High End Market Segment Analysis	
High End Statistics	
Total Industry Unit Demand	3,448
Actual Industry Unit Sales	3,448
Segment % of Total Industry	11.9%
Next Year's Segment Growth Rate	16.2%

Table 9.5 Section b High End Customer Buying Criteria		
	Expectations	Importance
1. Ideal Position	Pfmn 10.7 Size 9.3	43%
2. Age	Ideal Age = 0.0	29%
3. Reliability	MTBF 20000-25000	19%
4. Price	$29.00 – 39.00	9%

Table 9.5 Section c Top Products in High End Segment									
Name	Market Share	Units Sold to Seg	Revision Date	Stock Out	Pfmn Coord	Size Coord	List Price	MTBF	Age Dec. 31
Bid	23%	785	12/18/2013	114	10.7	9.3	$39.00	23500	1.19
Fist	20%	688	12/22/2013	91	10.2	9.8	$39.00	25000	1.18
Dixie	20%	688	12/3/2013	120	10.2	9.8	$39.00	24000	1.23
Cid	20%	684	11/15/2013	86	10.2	9.8	$37.50	23000	1.25
Adam	9%	313	7/7/2013	97	8.7	11.3	$37.50	21000	1.60
Bold	6%	195	7/27/2013	89	8.8	13.5	$34.00	22000	1.67

From section a, we see that the industry demand, 3448 units, was met. In most cases this means that some firms generated inventory. This is the case in the example. Section c shows that all firms had inventory at the end of the year.

Only 4 firms have significant shares in the high end segment. From section c, we see that Bid (23 percent), Fist (20 percent), Dixie (20 percent), and Cid (20 percent) are the dominant products in the segment. Adam (9 percent) and Bold (6 percent) have smaller market shares. An interesting point is that all 4 of the dominant firms had late revision dates (November or December). This is relevant because positioning is 43 percent of the customers' decision in the segment (section c). This high end segment needs products to be continuously R&D'ed. In order to conduct R&D, money is needed. An examination of each firms' year end cash balance is identified in Table 9.6.

Table 9.6 Year End Cash Balance ($)	
Firm	Balance ($)
Andrews	6855
Baldwin	3862
Chester	13,866
Digby	7236
Erie	8031
Ferris	7774

From Table 9.6, Chester ($13,866) has about 3 times as much money to invest than does Baldwin ($3862). Chester has more cash available at year end than any other firm.

One way to dominate this high end segment is to invest heavily in positioning to remain close to the ideal position. Due to positive cash balances Bid could remain the top product in the segment and Cid could also increase its market segment size. Baldwin must have funds to R&D Bid. This money would come out of the pooled cash of both firms. The same is true for the Cid product. In essence, a link alliance has been formed where Chester provides the majority of the cash. Bid's value to Cid is its positioning. Bid is closer to the ideal position than Cid. By using a portion of Bid's production line, Cid could sell some products at the ideal position (Table 9.5 section b). From the discussion above, the Capstone simulation could incorporate both scale and link alliances.

Discussion Questions

1. Explain the difference between an alliance and a joint venture.

2. Is the Oneworld airline alliance a scale or link alliance? Why?

3. Is expanding into new markets a benefit of scale or link alliances? Explain.

4. Explain economies of scope.

5. How can technology transfer be minimized?

6. How does the Capstone Simulation incorporate alliances?

7. Will alliances be more or less important in the future? Explain.

8. What is the “extended enterprise”? How is it related to the concept of an “innovation venture”? Briefly explain.

9. At the BRIC summit in 2010, what was concluded?

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OneWorld Airline Strategic Alliance Mini Case

Table 1 AMR: Percent of American Airline		
Year	2013	2014
Revenue ($ billions)	26.74	42.65
Net Income ($ billions)	(1.83)	2.88
EPS	(6.54)	4.02

American Airlines is the largest airline in the world based upon its merger with U.S. Airways. In 2014, the merged airlines became partners in the OneWorld alliance. This provides benefits to other alliance members who need an extensive U.S. coverage.

As discussed in the chapter, OneWorld is one of three global airline alliances. The others are Star and Skyteam. Both have a significant market presence in the U.S. Star has United/Continental and Skyteam has Delta Airlines. All three airline alliances have extensive global coverage. Each alliance is continuing to add partners.

Discussion Question:

1. How was American Airlines able to turn around its financial position in one year?

TNK-BP-Rosneft Mini Case

The Russian oil and gas industry is heavily regulated. The industry has 6 large firms. One of the larger players is TNK. Several years ago, TNK and BP formed a joint venture. The joint venture provided about 25 percent of BP's oil production and about 40 percent of its oil reserves.

Russia needed BP's operations capability and BP gained access to Siberia. Oil extraction was easier and safer than the unsafe deep water drilling in places such as the Gulf of Mexico. In 2010, the massive oil spill occurred in the Gulf of Mexico.

In January 2011, BP announced a new $16 billion strategic alliance with a second oil producer in Russia- Rosneft. At that time Rosneft was Russia's second largest oil company. BP stayed in its joint venture with TNK and tried to enter into a venture with Rosneft. Several senior level TNK managers attempted to block this new strategic alliance with Rosneft.

In March 2011, the Russian government voted not to grant this new strategic alliance. BP abided by the decision to not engage in the Rosneft strategic alliance.

In September 2011, Rosneft entered into a strategic alliance with Exxon Mobil. Exxon Mobile is the largest oil and gas firm in the world.

Discussion Question:

1. What happened to BP as a result of this new alliance?

Chapter 10

Acquisition Strategies

Learning and Assessment Goals

1. Understand the positive and negative ramifications of acquisitions.

2. Understand the process for achieving successful acquisitions.

3. Understand why due diligence is important.

4. Understand why the pace and size of acquisitions has increased recently.

5. Develop an understanding of which type of firm (acquiring or target) results in earnings of above average returns over time. Understand why this relationship exists.

About $3.2 trillion worth of acquisitions accrued globally in 2013, the most since 2007, according to data provider Dealogic. Table 10.1 shows the biggest mergers in the United States in 2013. Telecommunication and energy were the most active industries.

Table 10.1
U.S. Mergers in 2013

Acquirer	Target	Price ($ Billions)	Industry
Actavis	Allergan	66	Pharmaceutical
AT&T	Direct TV	48	Telecommunications
Comcast	Time Warner Cable	45	Telecommunications
Medtronic	Voviden	43	Medical Devices
Kinder Morgan	El Paso Partners	43	Oil & Gas
Halliburton	Baker	35	Energy

Source: Dealogic

Table 10.2 shows the largest global acquisitions in 2013.

Table 10.2
World's Largest Acquisitions in 2013

Rank	Acquiring Firm	Target Firm	Price
1	Berkshire Hathaway (U.S.)	H.J. Heinz	$28 billion
2	AB Inbev (Belgium)	Grupo Modelo	$20 billion
3	Suntory (Japan)	Beam	$13.6 billion
4	Joh. A. Benckiser (Germany)	DE Master Blenders	$9.8 billion
5	Sysco (U.S.)	U.S. Foods	$8.2 billion
6	Shuanghui International Holdings (China)	Smithfield Foods	$4.7 billion
7	Kroger (U.S.)	Harris Teeter	$2.4 billion
8	Suntory (Japan)	GlaxoSmithKline Drink Brands	$2.1 billion
9	Hormel (U.S.)	Skippy Peanut Butter	$700 million
10	Appollo Global Management (U.S.)	Hostess Brands	$410 million

Source: Dealogic

The diminishing impact of the global recession can be viewed by the number of international firm engaging in acquisitions. Of the top 10 acquiring firms in 2013, 5 were international firms not based in the U.S. (Table 2) A significant number of firms acquired were from consumer goods. Increases in consumer goods spending normally means that GDP/Capita is rising.

The Berkshire Hathaway acquisition was approved unanimously by Heinz's board of directors, who saw the deal as a way to further growth and put the company at the top of the industry. Meanwhile, Berkshire Hathaway viewed Heinz as a strong source of cash.

AB Inbev furthered its global penetration through the acquisition of one of Mexico's largest brewers, Grupo Modelo. The acquisition is positive for Grupo Modelo because of AB Inbev's dominant international presence.

Japan's Suntory Holdings International acquired United States brand Beam Inc, makers of such bourbon brands as Jim Bean and Maker's Mark. This acquisition gives Suntory a significant position within the U.S. liquor industry.

German investment group Joh. A Benckiser's has developed a significant position in the tea and coffee industry by acquiring both Peet's Coffee & Tea and Caribou Coffee for a combined $1.3 billion in 2012. The following year the group turned to home coffee, buying out DE Master Blenders just months after their split from Sara Lee.

Sysco acquisition U.S. Foods was the largest acquisition involving food distribution in almost a decade. Sysco's purchase put some important foodservice brands in its portfolio, while solidifying its position as the dominant food distribution service in North America.

Smithfield Foods broke records as the largest U.S. company ever to be acquired by a Chinese company when it was bought by Hong Kong-based holding Shuanghui International Holdings. This major deal caters to the growing middle class in China and its growing demand for meat as a daily meal staple.

In 2013, Kroger acquired regional chain Harris Teeter for $2.5 billion and took on $100 million worth of the chain's debt. This move allowed Kroger to strengthen its reach in the South and Mid-Atlantic regions where the Kroger brand had not been as strongly represented.

British pharma brand GlaxoSmithKline sold the rights to soft drink brands Lucozade and Ribena to Suntory, allowing the Japanese brand to expand its scope further into Europe.

Hormel Foods Corporation is a food processor primarily known for meat products like spam and chili. It ventured into other forms of protein with its largest acquisition to date.

Apollo acquired Hostess Snacks brands, including, among others, Twinkies, Mini Muffins, Cup Cakes, Ho Hos, Zingers, and Suzy Q's, and five Hostess Snacks bakeries located throughout the United States. The agreement provides for the acquisition of the assets of Hostess Snacks free and clear and does not require Apollo to assume any of Hostess Snacks' liabilities or other obligations.

Table 10.3 identifies the benefits and shortcomings of acquisitions.

Table 10.3 Ramifications of Acquisitions	
Attributes	**Problems**
Positive Benefits	**Negative Ramifications**
1. Access to international markets	1. Paying too much
2. Synergies resulting from economies of scale	2. Inability to achieve synergies
3. Synergies resulting from economies of scope	3. Failure to retain key personnel
4. Reduce costs of new product development	4. Too much debt
5. Entry into more attractive industries	5. Invest in mature industries

Attributes of Successful Acquisitions

Access to International Markets

Many times firms will acquire targets to expand into international markets. One example is General Motors' acquisition of Daewoo. Daewoo has production facilities in China, the Philippines, Vietnam, the Czech Republic, Poland, and Romania. In addition to market positions along the Pacific Rim, this acquisition provides G.M. access to production facilities in Eastern Europe. This is important because G.M. has not made money in Europe since 1999. In 2004, G.M. lost $792 million in Europe. One reason is because its primary European manufacturing facilities are in Germany, which is a very expensive labor market.

DHL's acquisition of Airborne provided DHL with the number 3 (behind Fed Ex and UPS) position in the U.S. air express industry. This network is important because DHL has the most extensive international distribution network of all carriers. This provides DHL an advantage over UPS and Fed Ex for international shipments. DHL also benefited by acquiring Airborne's distribution infrastructure within the U.S.

A key benefit of acquisition of firms in international markets is that the acquiring firm obtains access to the target's customer base. British Petroleum's acquisition of Amoco provided British Petroleum access to all of Amoco's U.S. customers. Another related positive benefit of acquisitions is the creation of synergies.

Generic drug company Watson Pharmaceuticals acquired Swiss based Actavis in 2012 for $5.9 billion in an effort to significantly boost its international presence.

UPS' $6.8 billion acquisition of TNT Express in 2012 gives UPS access to all markets within the European Union.

Synergies Resulting from Economies of Scale

Synergy exists when the value created by units working together exceeds the value those units could create working independently. Synergy can be created by the efficiencies derived from economies of scale. Firms generate economies of scale by more fully utilizing excess capacity.

Acquisitions result, in part, because firms have excess capacity. This excess capacity can be productively utilized to generate economies of scale. Economies of scale can result from a firm acquiring a target within the same 4-digit industry. Exxon's acquisition of Mobil created substantial economies of scale as did Yellow's acquisition of Roadway. The latter acquisition combined the second and third largest firms within the LTL (less than truckload) segment of the trucking industry. Economies of scale are important in the trucking industry because the industry is quite mature and the customer base views price as a key buying criteria. The primary benefit that Yellow obtained as a result of the USF acquisition was economies of scale.

Another industry in which economies of scale are important is the telecommunications industry. In February 2004, Cingular Wireless acquired AT&T Wireless. In December 2004, Sprint acquired Nextel. In January 2005, SBC acquired AT&T business and customer divisions. In 2007, AT&T Corp. acquired Bell South[3].

The international airline industry is another example of acquisitions creating economies of scale. In 2003, Air France acquired KLM. Lufthansa is in the process of acquiring Swiss Airlines. For Swiss Air, the acquisition may provide for survival within a consolidating industry. Swiss Air has been unprofitable with a cumulative net loss of nearly two billion francs from 2001 to 2004. They have undertaken a series of restructuring programs and management changes, but losses have continued as fuel prices have increased. The benefit to Lufthansa is that a European competitor is eliminated.

The merger of Xstrata and Glencore in 2012 will create an $80 billion dollar mining firm which should lead to significant economies of scale.

Synergies Resulting from Economies of Scope

Economies of scope are cost savings that a firm creates by successfully transferring some of its resources and capabilities that were developed in one of its businesses to another of its businesses. Fed Ex's acquisition of Roadway Package Services (RPS) provided Fed Ex with a ground infrastructure that could be more fully utilized for both air express and ground shipments. Cendant's (the holding company for Gulliver's Travel and Octopus Travel Group) acquisition of Donvand Ltd. will provide economies of scope as Cendant begins to focus upon the travel and real estate industry. CSX (railroad) has been involved in a number of acquisitions that have provided economies of scope. With the acquisition of Sea-Land Corporation, CSX established a position in the global ocean shipping industry. Boeing's acquisition of McDonnell Douglas created economies of scope by establishing positions within the military aircraft industry.

Tata Motors' (India) acquisition of Jaguar (2010) and Land Rover in 2011 allows Tata to more fully utilize its flexible manufacturing operations.

Reduce Costs of New Product Development

New product development can be costly. As a result, some firms acquire targets that are within months of introducing new products. Part of Cisco's success with acquisitions is because it will only acquire firms that are within 6 months of a new product introduction. Since products are ready to be introduced into the marketplace, the acquiring firm does not have to invest in R&D. Equally as important, products can be introduced into the market more quickly because the acquiring firm does not need to engage in a new product development process.

Sun Microsystems acquired SevenSpace in late 2004. This acquisition allowed Sun access to management services for computers for the first time. SevenSpace has a wide range of hardware and software that assists Sun in developing its service business.

In late 2004, Johnson & Johnson acquired Guidant Corp. Guidant makes devices that stabilize heart rhythms. Johnson & Johnson already has a 43 percent share of the coated coronary stint products; the acquisition will allow Johnson & Johnson to acquire Guidant's 38 percent share of heart rhythm devices[4].

In early 2005, Medco Health Solutions acquired Accredo Heath. This transaction marks the entry of a pharmacy benefit manager (Medco) into the specialty pharmacy industry[5]. Accredo provides patients with specialty drugs for diseases like multiple sclerosis and hemophilia. Medco views the specialty drug market as having a much higher growth rate than other segments of the pharmaceutical industry[6].

Amazon's $775 million acquisition of Kiva Systems in 2012 gives Amazon an avenue for introducing robotics into its customer fulfillment centers.

Entry into More Attractive Industries

PenaultPrintempsRedout's (PPR) acquisition of Gucci provides entry for PPR into the luxury goods industry. PPR's rationale for the acquisition was to enter an industry that has higher margins. For Gucci, the acquisition may provide financing to more successfully position itself against the industry leader Louis Vuitton.

General Motors' acquisition of Electronic Data Systems (EDS) and Hughes Aerospace is an attempt to enter more attractive industries. Proctor & Gamble's acquisition of Gillette provides them with a dominant position in the wet shaving industry. Gillette has a 74 percent worldwide market share in the wet shaving industry. In addition, Gillette had previously acquired Duracell in the battery industry and Oral-B in the dental care industry. The industries that Gillette has entered have been more profitable than the industries Proctor & Gamble has entered. For 2003, Proctor & Gamble's return on sales was 12.6 percent; for the same period, Gillette's return of sales was 23.3 percent.

In an attempt to make its way into an area which has grown significantly in recent years, cloud computing; Oracle Corp. came to an agreement in 2012 to acquire online software maker Taleo Corp. for $1.9 billion.

Problems with Acquisitions

Paying Too Much

Many firms simply pay too much for targets[7]. Due to the bidding war between Verizon and Quest for MCI, Verizon's accepted bid represented a 25 percent premium.

Omnicare acquired NeighborCare for $1.45 billion[8]. This represented a $150 million premium. In addition, Omnicare assumed approximately $250 million of NeighborCare's debt[9]. As shown in Table 10.3, many firms in many industries paid significant premiums to acquire target firms.

Inability to Achieve Synergies

Many acquisitions are sold based upon cost savings the acquiring firm hopes to achieve as a result of synergies. Establishing synergies between Compaq's P.C. business and Hewlett Packard's imaging and printing business were a primary reason for the Compaq acquisition. As a result, Hewlett Packard felt that significant synergies would exist and it could achieve a larger market share in the enterprise computing and P.C. industry. However, in 2004, only Hewlett Packard's imaging and printing segment remained profitable. Since the merger, H-P has lost market share[10]. The Compaq merger hasn't helped in other areas either. In the 12 months ended in September 2005, IBM and Dell gained share in network servers while H-P declined. H-P's operating margins in business services have fallen for two consecutive years[11]. While Hewlett Packard attempted to cut costs, the cost savings were never realized. In fact, profit margins have continued to decline, especially in the P.C. business.

American Airlines acquisition of TWA created too much excess capacity and the combined airlines were unable to achieve cost savings. This acquisition, coupled with the aftermath of 9/11, has American Airlines in financial difficulty.

U.S Airways' 2012 attempt to acquire American Airlines would have created a firm which would not be able to obtain synergies from combining two major airlines. Many U.S. airlines have acquired other U.S. airlines in the past (e.g. Northwest, Delta). None of these acquisitions have led to significant synergies. It needs to be noted that U.S. Airways has been to Chapter 11 bankruptcy protection while American Airlines is currently in Chapter 11 bankruptcy.

Failure to Retain Key Personnel

Entry into industries other than a firm's core or related industry can cause significant problems. Firms may have difficulty achieving advantages in industries that are unrelated to their primary industry because the acquiring firm's management team has no experience in the unrelated industry. Phillip Morris' acquisition of Miller Brewing is an example.

After the acquisition of Compaq by Hewlett Packard, Michael Capellas, the CEO of Compaq left to become CEO of MCI. The other members of Compaq's senior management team also left. Thus, Hewlett Packard was trying to compete against industry leader Dell without managerial resources with substantial industry experience in the P.C. industry. The management team of the target firm has specific knowledge of industry structure, the customer base, the evolution of competition within the industry and knowledge of the target firms' domestic and international infrastructure network. These issues are of critical importance if the target is in an industry not related to the acquiring firm.

When PepsiCo acquired Taco Bell, Pizza Hut, and KFC, the logic was that these fast food chains would provide distribution outlets for Pepsi's many beverages. PepsiCo eliminated critical managerial resources in the target firms. Afterwards, PepsiCo realized that the soft drink and fast food industries are quite different. Thus, PepsiCo spun these firms off as Tri-Con. With the addition of Long John Silver and A&W Root beer, the combined companies are now Wow Brands and totally independent of PepsiCo.

Hewlett Packard entered the Smartphone and tablet markets with its $1.2 billion acquisition of Palm in 2010. Hewlett Packard did not retain the Palm management team. HP left this market less than a year later.

Too Much Debt

Too much debt restricts the funds that are available for other expansion options. Dynegy's acquisition of Illinois Power significantly restricted Dynegy's ability to further expand in the newly deregulated utility industry. Dynegy finally sold Illinois Power to Ameren in 2004.

Quest Communication's $56 billion acquisition of U.S. West created a firm whose stock has since lost 87 percent of its value. The combined firm now has $17 billion in debt.

The antivirus software firm, Symantec, has lost 35 percent of its stock value after its $13.5 billion acquisition of Veritas[12]. Symantec has not been able to pay down its debt as a result of the acquisition. The $181 billion acquisition of Time Warner by AOL has created substantial long-term debt. Since 2001, the market capitalization of AOL/Time Warner has declined in value by $233 billion[13]. In addition, the combined firm is struggling to pay down debt as a result of the merger.

The $11.5 billion acquisition of Sears by Kmart has created substantial debt. This increase in debt will make it difficult for the combined firms to compete against Wal-Mart. Besides, they are still much smaller than Wal-Mart. Wal-Mart had sales of $256 million in 2004 compared to $55 billion as a result of the Kmart acquisition of Sears.

Caterpillar acquired Bucyrus Mining for $8.6 Billion in 2011. Caterpillar paid a 32% premium and obtained all of Bucyrus' debt.

Invest in Mature Industries

As discussed in Chapter 1, Industry Analysis, firms that are in mature industries must focus upon costs to be successful. During the maturity stage, firms attempt to reduce costs because there is very little product differentiation. The American Airlines acquisition of TWA in 2000 is an example. Even before 9/11, U.S. airlines were only marginally profitable. As such, American acquired TWA to achieve economies of scale. The acquisition resulted in American Airlines becoming the largest airline in the world. Because American Airlines and TWA both had excess capacity, the combined airline had even more excess capacity.

Within the U.S. airline industry, Southwest Airlines is the only carrier that has been profitable every year since the U.S. airline industry was deregulated in 1978. Southwest generates profit because its business model is applicable to a mature industry. Southwest does not utilize a hub and spoke network. Each lane (pair city) combination must be profitable. If a lane segment is not profitable, it is eliminated. As such, each part of Southwest network is profitable. Because other airlines utilize a hub and spoke business model, lane segment analysis is not performed. In a mature industry, each unit of your firm needs to generate profit.

After the railroad industry was deregulated in 1980, rail carriers began to acquire trucking firms to increase their scope of coverage. These trucking subsidiaries were unprofitable because the trucking industry was a mature industry. One reason was because of excess capacity. The railroads believed that some of their time sensitive freight could travel by truck as opposed to by rail. The railroads were unsuccessful at increasing the utilization of trucks because trucking firms began to lose freight to independent owner operations. These non-union owner operations could carry freight at much lower rates.

As has been discussed in the text, the trucking industry is a very mature industry. When Yellow Freight acquired Roadway ($1.05 billion) (Trucking) in 2003 and USF Corp ($1.37 billion) (Trucking) in 2005, it established a larger market share in its own industry (Trucking). As a result of acquiring firms in the mature trucking industry, Yellow has lost over $2 billion since these acquisitions occurred.

Process for Achieving Successful Acquisitions

While firms have experienced mixed results with respect to acquisitions, the process by which acquisition candidates are selected and implemented may make future acquisitions beneficial. Due diligence is a critical part of the process.

Due Diligence

Due diligence is a comprehensive, complete analysis of an acquisition opportunity. It is a third party's independent objective view of the value of an acquisition target. The due diligence process should be performed for every acquisition opportunity. Consulting firms and investment bankers conduct due diligence because they have substantial industry experience. These firms perform many tasks. Some important due diligence functions are (1) determining whether the acquisition will be friendly or hostile (2) what is the maximum bid that the acquiring firm should offer to make the acquisition opportunity profitable (3) will the acquiring firm have to divest unwanted business sectors of the target firm (4) what realistic cost savings will be realized as a result of the acquisition (5) what is the likely reaction of Wall Street (6) what has been the financial performance of the target over time (7) what level of funds will be needed to make implementation successful (8) should the management team of the target be retained (9) what type of R&D capability does the target firm have that can be utilized by the acquiring firm and (10) determine the integration process. If effective due diligence is not completed, acquiring firms may pay too much for acquisition targets or inappropriate targets may be selected. For example, Hewlett Packard may have been wise to conduct due diligence before it spent $19 billion to acquire Compaq. A due diligence fee of $1 million may well have been worth it.

In December 2004, Oracle acquired PeopleSoft. The acquisition process started in June 2003. The final offer, $10.3 billion, represents a 25 percent premium over market price[14]. The combined firms will still trail SAP in terms of global enterprise resource planning software[15]. This was a hostile takeover. This means the target firm had no desire to be acquired. Hostile takeovers create significant implementation problems. This leads to our second criteria for successful acquisitions: engage in friendly acquisitions.

Engage in Friendly Acquisitions

Hostile acquisitions can cause problems between acquiring and target firms. With hostile takeovers, acquiring firms may end up paying a premium. In many cases, the senior management of the target is removed. If the target is in an unrelated business, the acquiring firm may not have the managerial resources to integrate the combined firms' resources successfully. Target firms have many anti-takeover amendments that can be passed to further increase the price of the acquisition. Cisco, which has made hundreds of successful acquisitions, will not engage in hostile takeovers. Cisco values the target firm's human resources. Cisco's policy is to concentrate on people first and business integration second. Berkshire Hathaway's 2009 acquisition of BNSF Railroad was a friendly acquisition which has generated position results in terms of net income and EPS.

Maximize Resource Utilization

At times, firms make acquisitions to obtain greater resource utilization. At all times, firms have excess capacity[16]. This excess capacity can be utilized to obtain economies of scale or economies of scope. Economies of scale may result from same industry acquisitions. Anheuser Busch's acquisition of Hardin, a Chinese brewer, allowed Anheuser Busch to achieve economies of scale in China. South African Brewers (SAB) acquisition of Miller created economies of scale and resulted in SAB obtaining a significant position within the U.S. market. UPS' acquisition of Overnite Trucking may result in economies of scope by using the same trucks for small package and large freight transportation. Proctor & Gamble's acquisition of Gillette provides for increased economies of scope by more fully utilizing Proctor & Gamble and Gillette's extensive international infrastructure. The Air France acquisition of KLM permits Air France to maximize its own utilization of resources due to the increase in international passengers and airfreight traffic. Interbrew's (Belgium) acquisition of Ambev (Brazil) provides both firms with access to each other's distribution infrastructure. Sometimes, firms will also acquire targets for brand names.

Diversify Into Firms That Have Strong Brand Names

Proctor & Gamble plans to commit significant resources to grow its own and Gillette's major brands. Currently, Proctor & Gamble has about $52 billion in sales and 21 billion dollar brands[17]. P&G's largest competitor is Unilever. Unilever has $52 billion in sales and 12 billion dollar brands[18]. With the acquisition of Gillette, Proctor & Gamble adds 10 more billion-dollar brands[19]. Gillette is the market leader in the wet shaving industry with a 75 percent market share. The acquisition may provide funds for Gillette to further develop these brands domestically and globally. Proctor & Gamble's acquisition of Gillette gave it strong brands in the wet shaving industry (Mach 3, MP3, Venus Divine), and the health care industry (Oral B). Gillette has one of two strong brands – Duracell – (the other being Energizer) in the global alkaline battery industry[20]. In 2003, Gillette purchased the leading battery firm in China. Also in 2003, Gillette had record $1.35 earnings per share[21]. Forty one percent of Gillette's sales have come from products introduced in the past 5 years[22]. Proctor & Gamble already has an established infrastructure in China. Its Rejoice brand has a 25 to 30 percent share of the Chinese market. Gillette has a stronger position in toothpaste and deodorant in developing markets such as Brazil and India. Gillette's products more effectively compete against Unilever in these markets.

P&G should be able to grow Gillette in developing markets quicker and more efficiently. P&G's sales into emerging markets like Russia, Mexico, and China grew by 20% in 2003[23]. Gillette had declining sales in Russia and Germany, while P&G has increased its position by acquiring Germany's Wella AG hair care line. This acquisition may help increase Gillette's position against Unilever in Germany.

P&G has strength in the women's personal care market with products such as Clairol, Olay, and Tide. P&G can provide Gillette with expertise to help improve the marketing of their products to women. Gillette, on the other hand, will provide benefits to P&G in the form of its knowledge of marketing to men because of their success with Gillette and Braun products. This acquisition puts the combined firm in an advantageous position for sustainable growth.

South African Brewers' (SAB) acquisition of Miller beer is another example of a firm acquiring a strong brand. Before the acquisition, South African Brewers had a small position in the North American beer industry. The Miller acquisition significantly increased SAB's position within North America. InBev's 2008 acquisition of Anheuser Busch allowed InBev to acquire a dominant position within North America. Anheuser Busch has the strongest brand name of any beer firm in the U.S. and a growing presence in China. These acquisitions are important because the United States and China are the two largest beer markets in the world[24]. In many cases, firms acquire high growth firms.

Acquire High Growth Firms

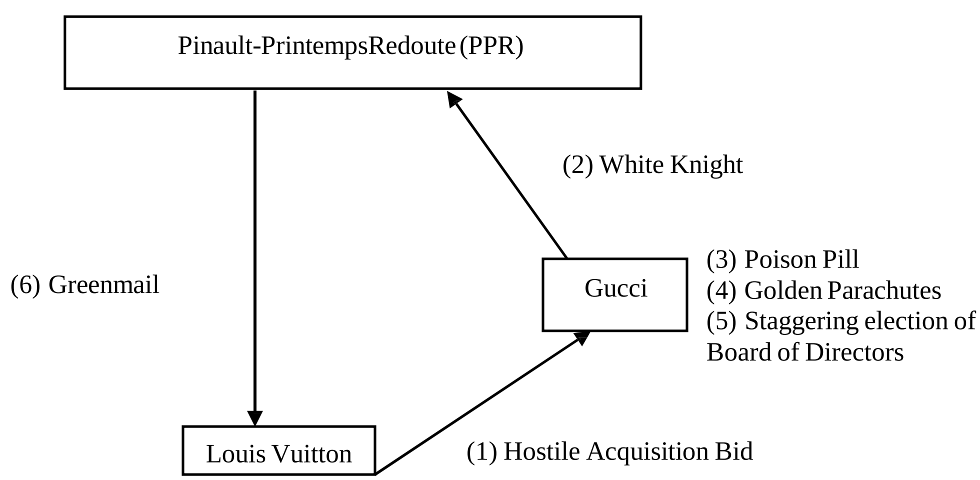
In 1997, Sidney Frank Importing introduced Grey Goose Vodka. By 2002, Grey Goose had sales volume in excess of one million cases[25]. In 2004, Grey Goose had a sales volume that was close to the industry leader, Stolichnaya. In 2004, Bacardi acquired Grey Goose for $2 billion[26].

In 2000, Topspin Communications was founded. Topspin utilizes its equipment to connect PC's, storage computers, and the computer servers that perform corporate data analysis[27]. In 2005, Cisco acquired Topspin for $250 million[28]. Cisco believes that Topspin will improve its ability to provide customers with networking technology that lets them build data centers in a flexible, innovative, grid-like fashion. This acquisition follows Cisco's 2002 acquisition of Andiamo Systems that makes switches that connect data-storage computers[29].

Hostile Acquisitions

Up to this point, it has been assumed that the target is willing to be acquired. If the target attempts to fight off the potential acquiring firm's acquisition bid it is referred to as a hostile acquisition attempt. If the acquiring firm completes the acquisition, it will likely pay a higher price for the target. This is because the target firm can implement anti-takeover amendments. In Figure 10.1, the Louis Vuitton hostile acquisition attempt of Gucci demonstrates several of these actions:

Figure 10.1
Louis Vuitton Hostile Takeover Attempt of Gucci



After Louis Vuitton had acquired more than a 15 percent share of the outstanding stock of Gucci, Gucci contacted Pinault-Printemps-Redoute (a retailer) to act as a white knight. A white knight is a firm that will take an ownership position in a target firm that is normally greater than the position taken by the hostile acquiring firm. In this case, PPR acquired a larger percentage of the outstanding shares of stock than Louis Vuitton. A white knight may not have an interest in acquiring the target. However in some cases, the target will be acquired. PPR did acquire Gucci.

For Louis Vuitton to continue with the acquisition, it would need to acquire additional shares of stock. By PPR obtaining an ownership position in Gucci, Louis

Vuitton would need to acquire over 50 percent of Gucci outstanding stock. If PPR was to acquire Gucci, Louis Vuitton would then need to acquire both PPR and Gucci. It may be too costly for Louis Vuitton to continue with the acquisition attempt of both firms.

Because PPR is a retailer while Louis Vuitton is a luxury goods conglomerate, most of PPR's product lines are unrelated to Louis Vuitton's. Acquiring an unrelated firm by the target firm is a good way to drive the acquiring firm away.

Another anti-takeover strategy is referred to as a poison pill. Gucci also took this action. Gucci created an employee stock ownership plan (ESOP) to create a class of stock which was offered for employee purchase. As this stock was acquired, it diluted Louis Vuitton's initial position because of the creation of additional, new stock.

Another anti-takeover strategy is called greenmail. As PPR was in the process of acquiring Gucci, it could have purchased Louis Vuitton's stock in Gucci for greater than their market value. In return for obtaining a premium on the stock it had purchased, Louis Vuitton would agree not to purchase any additional Gucci shares of stock.

A fifth type of anti-takeover amendment is called golden parachutes. Golden parachutes require that the acquiring firm (Louis Vuitton) pay large lumps of payments to the senior management team of the target firm in order to complete the acquisition.

Firms can also stagger the election of Board of Directors. If a firm has 12 board members, each year 3 will come up for re-election. If an acquiring firm completes a hostile takeover, it will take 12 years to obtain total control due to the staggering pattern of board members.

With the number of anti-takeover amendments that can be implemented, the cost of the acquisition continues to increase. In many cases the acquiring firm will search for more friendly target firms. This is exactly what happened with Louis Vuitton. PPR acquired Gucci and Louis Vuitton began to look for other options.

In some cases, target firms will attempt to create additional value in order to increase the purchase price of the target. Scottish & Newcastle PLC has continued to reject a hostile takeover bid offered jointly by Heineken NV and Carlsberg A/S[30].

Scottish & Newcastle has sold its unprofitable French business and engaged in downsizing to cut costs further[31].

Are Acquisitions Beneficial?

Acquisitions are positive for the senior managers of target firms. The target CEOs who've decided to sell in the 10 biggest U.S. deals in 2014 are set to rake in an estimated $430 million in incentives, according to a study done by pay-tracking firm Equilar at the request of The Associated Press.[32]

Evidence suggests that for acquiring firms, acquisition strategies may not always result in desirable outcomes[33]. Studies have found that shareholders of target firms often earn above-average returns, while shareholders of acquiring firms' returns are near zero[34]. During the 1990's, acquiring shareholders lost $216 billion[35]. Between 1998 and 2001, 87 of the largest acquisitions lost $134 billion in shareholder wealth[36].

There are several reasons for these results. The failure to complete an effective due diligence process often results in the acquiring firm paying a premium for the target company. In addition, the entire acquisition process is very time consuming. Typically, substantial managerial time and energy are required to research, acquire and implement acquisitions. Because senior managers are consumed with the acquisition process, they may not devote the necessary time to run their existing business. Senior managers must still focus upon the mission of the firm while meeting quarterly financial targets. The acquisition process is an additional responsibility to the

ongoing duties of senior management. In addition, different stakeholders have different expectations.
Communication to various stakeholders is of critical importance.

Employees need to understand why acquisitions are being made and what the ramifications are for them. If collective bargaining units represent the employees, they will also need to be informed. Everyone inside the firm will need to understand how the integration will take place.

Customers also need to be informed. Customers need to be assured that products will not be affected from an availability and distribution perspective. Customers of both the acquiring firm and target need to be informed as to how the acquisition will benefit them (e.g. improvements in distribution channels).

Shareholders will need to understand why the acquisition was made and they need to be informed how long the integration process will take. Shareholders need to understand how and when the acquisition will result in increases in stock values.

Suppliers, wholesalers, and retailers need to understand how the acquisition will affect inbound and outbound logistics. In many cases, new distribution networks may need to be developed to provide quality service to existing and target firm customers. If the target firm is an international company, domestic and international distribution networks may need to be integrated.

The three primary growth modes by which firms grow are (1) internal development, (2) strategic alliances, and (3) acquisitions. Table 10.4 is a comparison of these modes of growth.

Table 10.4
Comparison of Primary Modes of Growth

Internal Development	Acquisitions	Strategic Alliances
• Significant time to implement • May be too late to market with new products/services • No partners = no risk of technology transfer	• Expensive; cost savings may not be realized • Significant costs and time to integrate target within acquiring firm • Divestment may be difficult • Can generate quick, not necessarily profitable, growth	• Risk of technology transfer • Ownership of partners' assets not obtained • Low to moderate entry and exit barriers

In many cases, firms will use all three modes of expansion depending upon the stage of industry life cycle, the nature of competition, the financial strength of the firm, and the conditions within selected markets.

Acquisitions as a Source of Innovation

Innovation success is critical to organizational competitiveness in the global economy. Companies that innovate enjoy the first-mover advantages of acquiring a deep knowledge of new markets and developing strong relationships with key stakeholders in those markets. Innovators are also able to solve many of the most challenging problems associated with changing environments. Organizational innovation can result from using skills and capabilities that are inside the firm (internal innovation) or by acquiring innovation skills or innovative products through purchasing other firms.

The rapid change and diffusion of new technology, along with substantial competition in domestic and international markets, has placed increasing importance on firms' ability to innovate and to introduce new innovations into the marketplace[37]. In fact, innovation may be required to maintain or achieve competitive parity within domestic markets, much less achieve a competitive advantage in many global markets[38]. Any action that either puts the organization into new strategic domains or significantly alters the way the organization attempts to serve existing customers or constituents is considered an innovation.

Acquisitions assist firms in the innovation process. Experiences show that developing innovations internally and introducing them into the marketplace can be expensive. In some cases, internal innovation is a high risk activity. In 1985, Fed Ex lost several hundreds of millions of dollars on its Zapmail product innovation. In addition to the loss of money, the amount of resources which were committed to this innovation took away substantial resources that could have been utilized for international expansion. A failure to innovate may put firms on a path to failure. Moreover, significant amounts of time are often required for product innovations to earn a profitable return on the firm's investment. Even with proper support in terms of resources and time, the knowledge that eight of 10 new products fail commercially demonstrates that internal innovation is risky.

Acquisitions can be a substitute for innovation. Because of the low probability of success and the length of time required for innovations to satisfy hurdle return rates, some managers believe that internal innovation is a high-risk activity. In these instances, acquisitions may be an attractive alternative because they offer immediate entrance to a market that is new for the acquiring firm and/or a larger share of a market the company is serving already. As with internal innovation, external acquisitions are not risk free; however, the outcomes from acquisitions are more certain and can be estimated more accurately compared to internally developed innovation. Firms can innovate by acquiring innovation skills or innovative products through purchasing other firms.

Many pharmaceutical firms are making acquisitions to add new drugs to existing product lines (e.g. cholesterol reducing medicine). For example, Warner-Lambert acquired Agouron Pharmaceuticals Inc. in large part due to Agouron's research and development expertise in such areas as cancer.

Innovation (whether developed internally or acquired) is a source of value creation and competitive advantage for individual firms. Innovation increasingly is recognized as a key link to the firm's strategic competitiveness. Innovation may be a factor that differentiates successful companies from competitors. Acquisitions can become a substitute for innovation in companies actively using an acquisition strategy.

Discussion Questions

1. Why has the telecommunications industry consolidated?
2. Is size of target firm related to acquisition success?
3. Identify and explain the attributes of successful acquisitions.
4. Did Oracle follow the recommended approach of achieving acquisition success? Explain.
5. Explain the concept of synergy from an acquisition perspective.
6. Will acquisition of large targets continue? Explain.
7. Explain why hostile acquisitions are not normally recommended.
8. Explain anti-takeover amendments that target firms can implement to fight off hostile takeover attempts.
9. Did the pattern of mergers and acquisitions (M&A) change during the global economic recession (2007-2010)?

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Proctor and Gamble (P&G) Mini Case

P&G has 23 billion-dollar brands with annual sales of $1 billion to more than $10 billion, and 14 brands with sales of $500 million to $1 billion – many of those with billion-dollar potential. (Annual report 2014) Nearly all of the 23 billion-dollar brands and the majority of the $500 million to $1 billion brands hold the number one or two position in their category or segment. They all have significant growth and value creation.

P&G serves nearly 5 billion people around the world with its brands. The company has one of the strongest brands in the world, including Always, Ambi Pur, Ariel, Bounty, Charmin, Crest, Dawn, Downy, Fairy, Febreze, Gain, Gillette, Head & Shoulders, Lenor, Olay, Oral-B, Pampers, Pantene, SK-II, Tide, Vicks, Wella, and Whisper.

In addition, P&G has a substantial portion of international revenue. Table 1 identifies sales by geographic region (as of 2014):

Table 1
P&G Global Market Presence (2014)

Market	Percent of Sales
North America	39
Western Europe	28
C.I.S., Middle East, and Africa	7
Latin America	10
Asia	16
Total	100

P&G business segments are focused upon 3 primary areas: (1) beauty and grooming, (2) health and well-being, (3) household care. Table 2 shows the dispersion of sales and earnings for each business segment as of 2014.

Table 2
Revenue and Earnings by Business Segment (2014)

Business Segment	% of Net Sales	% of Net Earnings
Beauty	24	23
Grooming	10	17
Health Care	9	9
Fabric Care and Home Care	32	25
Baby Care and Family Care	25	24

In 2014, Proctor and Gamble's sales and earnings were balanced in several segments (e.g. beauty and grooming accounting for 24 percent of the sales and 23 percent of the earnings).

Discussion Question:

1. How should P&G grow its business?

Chapter 11

International Strategies

Learning and Assessment Goals

1. Understand the process of international strategy analysis

2. Be able to perform the analysis for determining international country attractiveness.

3. Be able to perform the analysis for identifying attractive international industries.

4. Be able to perform competitive analysis within an international industry.

5. Understand the different modes of entry into international markets.

This chapter discusses international strategy. Within the last 3 decades world trade has expanded from $200 billion to $7 trillion[1]. U.S. investment in international markets increased from $198 billion in 1990 to $2.03 trillion in 1999[2]. With these growth rates, the key question is not "if" a firm should develop an international strategy. The key questions are "where" and "how" a firm should establish international strategies.

Factors Encouraging International Expansion

There are several factors fueling this growth. First, firms generate excess capacity[3]. If this excess capacity is excess production capacity, firms may attempt to utilize this extra capacity in international markets[4]. Utilization of the excess capacity in international markets may allow a firm to obtain a lower cost position within its domestic markets by generating economies of scale. In addition, firms generate additional revenue streams from international expansion.

Second, firms may be able to enter international industries that are at earlier stages of the industry life cycle. In Chapter 3, Industry Analysis, we learned that homogeneous products characterize the maturity stage of an industry's life cycle with the advantage to large-scale providers. Within the U.S., many industries are in the maturity stage of the industry life cycle. Examples are the airline, trucking, fast food, and beverage industries. All of these industries have undergone substantial consolidation. Because firms within the maturity stage of the life cycle must compete on price, large scale is required to survive the industry consolidation. As discussed in Chapter 10, the U.S. telecommunications industry is a prime example. Verizon's $8 billion acquisition of MCI, Sprint's $35 billion acquisition of Nextel and SBC's $22 billion acquisition of AT&T Wireless have created a small number of very large telecommunications players. If these firms do not expand into international markets, they can only compete on price. International expansion represents the only substantial opportunity for growth within this industry.

A third factor that has fueled international growth is the emergence of China as a consumer market. China has an emerging middle class that has 300 million consumers[5]. This is approximately equivalent to the entire U.S. population. China is a primary market for outsourcing. Many manufacturing firms have significant positions within China. As China has developed a more complete infrastructure, growth has accelerated. The beer industry is one example of the growth of China. China is the second largest (U.S. is first) beer drinking market in the world[6]. This is one reason Anheuser Busch acquired Hardin, a large Chinese brewer, in 2003. In the near future, Anheuser Busch will be increasing its stake to 27 percent in Tsingtao, the largest Chinese brewer[7].

A fourth factor that has fueled international growth is the deregulation of many industries in international markets. India is in the process of deregulating several of its industries. The passenger airline industry is one example. Air India and Indian Airlines are experiencing competition from Britain's Virgin Group, Emirates Group, and Jet Airways[8]. Jet Airways is a privately owned airline in India[9].

Table 11.1 shows the difference between regulated and deregulated industries.

Table 11.1 Fundamental Differences Between Regulated and Deregulated Industries		
Condition	**Existence of Condition**	
	Regulated	**Deregulated**
: Control on number of firms	Yes	No
: Market share controlled	Yes	No
: Market entry limited	Yes	No
: Price and profitability controlled	Yes	No
: Competition limited	Yes	No
: Scale of operating authority constrained	Yes	No

When industries are regulated or state owned, price and profitability are controlled by the regulatory agency[10]. The Russian oil industry is an example of a state owned industry. Industries that are regulated are protected because the government controls industry conditions by limiting competition, controlling market entry, and putting limits on the scale of operations. Because several U.S. industries have been deregulated for some time, firms in the U.S. have more experience growing in deregulated industries. The airline and airfreight industries were deregulated in 1978. The trucking and railroad industries were deregulated in 1980. The telecommunications industry was deregulated in 1984. As these industries have become deregulated, firms have developed strategies to compete in a competitive global market.

The fifth factor that has fueled international growth is defensive in orientation. If firms do not engage in international expansion, international firms may establish positions within the U.S. Many international firms have established strong positions in U.S. industries. Toyota (Japan) is profitable within the U.S. auto manufacturing industry. Sony (Japan) has established a dominant position within the electronics and gaming industries in the U.S. Nokia (Finland) has established a strong position within the U.S. cellular phone industry. Louis Vuitton (France) has established a leadership position in the U.S. luxury goods industries. DeBeers (South Africa) has established a dominant position within the U.S. diamond industry.

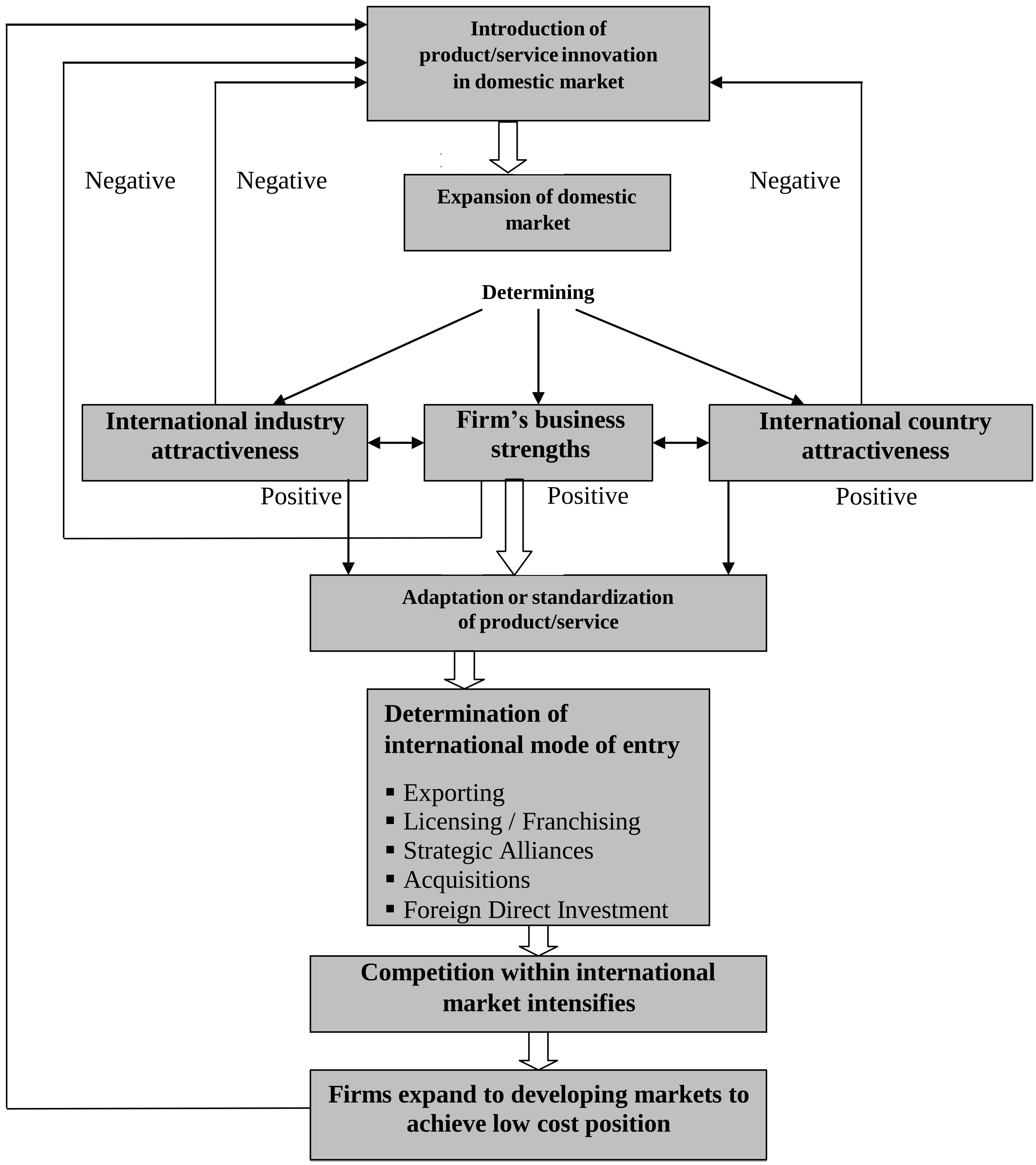
International expansion provides the firm with significant growth opportunities; however, international expansion can be a brake or an accelerator to firm growth. Let us discuss the brake aspect first.

The target country’s government can be the primary brake. To be successful, firms must work within the laws, regulations, rules, and cultural norms of the international country. A firm’s government can prohibit any firm from entering its country. As such, the institutional view must be dealt with first. The government of the international country should be the first stop of any international firm. The government may permit expansion into international markets but specific modes of entry. Modes of international expansion would include exporting, licensing, strategic alliances, acquisitions and/or foreign direct investment (FDI).

Once the institutional factors of a country have been met, the resources based view of the firm can be used for expansion. The resource based view becomes the accelerator to firm growth. All firms have resources which can be used for firm growth. However, it is not the resources which determine firm growth. It is how these resources are used to accelerate international expansion is what separates one firm from another. In many cases, the senior management team is what separates one firm's success and other firm's failures. A firm's senior management team represents intellectual capital from which may be rare, valuable, not substitutable, and/or not subject to imitation. Firms which possess all or some of these factors may be able to create more value than competitors in establishing and maintaining competitive advantage.

Figure 11.1 represents a framework for developing international strategy.

Figure 11.1
Development of International Strategy



Innovation in Domestic Market

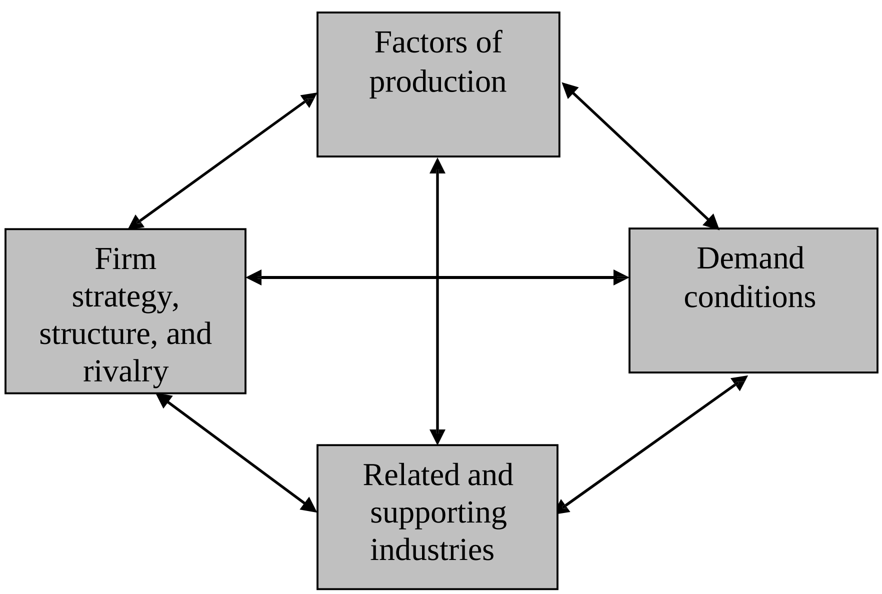
Figure 11.1 illustrates the stages of evolution as a firm establishes positions within international markets. In most cases, firms will innovate within their domestic market. Fast food (McDonalds), chips (Intel), PC's (Dell), air express (FedEx), and operating systems (Microsoft) were all developed within the U.S. before expanding to other countries. Coke and Pepsi were also developed within the United States before being introduced into international markets. Luxury cars (Mercedes Benz, Jaguar, Volvo) were all developed within their home country before they were sold internationally. L'Oreal products were first introduced within France.

Firms will tend to fully develop products/services within domestic markets before expanding internationally[11]. Once domestic markets are fully developed, the firm can enter international markets from a position of strength[12].

Determining International Country Attractiveness

Several factors, shown in Figure 11.2, help firms determine whether or not a certain country is attractive to expand into.

Figure 11.2
Determinates of International Country Attractiveness



Source: Adapted with the permission of The Free Press, from *Competitive advantage of nations***,** by Michael Porter, 72. 1990.

International country attractiveness can be based on 4 factors: (1) factors of production, (2) demand conditions, (3) related and supporting industries and (4) firm strategy, structure, and rivalry[13].

Factors of production consist of inputs into an industry[14]. The availability of raw materials, the degree that infrastructure (e.g. roads) has been developed, the supply of skilled labor to produce a firm's products, and the development of a communications system are factors which determine a county's attractiveness to produce and distribute goods to consumers. A quantitative measure to determine a country's attractiveness is to measure gross domestic product (GDP) per capita. Countries that have higher GDP per capita will, in general, have more consumer income to support a given industry.

Demand conditions are the second factor. Demand conditions refer to the potential of the market to purchase goods and services within an international market[15]. For example, substantial growth rates in a market may signal that demand is sufficient to support additional competitors. A firm must ascertain if the demand is large enough to support large-scale facilities needed to generate economies of scale. One way is to examine the size of competitors' facilities and revenue streams on a country-to-country basis. Annual reports and 10-Q reports are good sources of this information.

Related and supporting industries are the third factor[16]. If countries have industries that are related, a firm can generate alternative revenue streams. A firm may generate economies of scope by using its resources in related or supporting industries. Within the U.S., most revenue that airlines generate is from passengers. In many international countries, airlines have both significant revenues from passengers and freight. These airlines achieve economies of scope by moving both passengers and freight between international markets.

Strategy, structure, and rivalry are the last attributes to be evaluated for determining international country attractiveness[17]. Being able to adapt a firm's strategy to conditions within an international market is crucial. Different countries have different competitive conditions. In Japan, collusion is an accepted form of business development. As such, the Japanese have become very good at transferring technology both within and across industries. In Germany, firms must determine strategy by integrating the role of labor within the strategy. This is because labor unions have a seat on the board of directors in large German firms. In general, the more factors that a country meets, the more attractive the country becomes from an international perspective.

If firms do not enter international markets, they must continuously invest in R&D within domestic markets to obtain additional revenue streams from new product/service introductions. Development of international markets is crucial because the success of new product ventures is usually less than 10 percent within the U.S.[18]. In addition, international markets may be less mature than domestic markets. Sony believes that developing nations are a good source of growth for its existing PlayStation 2 product. By introducing the new PlayStation 3 product to the U.S. and Japan and the PS2 product to developing markets, Sony can take advantage of less mature gaming markets. Determining industry attractiveness in international countries is important.

Role of Government

One possible limitation of the diamond model is that the role of the international government is not specifically addressed. While Porter agrees government is important, he does not support its role enough to make it a fifth determinant in the model. Government's role is to influence the other four points of the diamond and Porter's message for firms is to develop the diamond by using government only as an aid but not as a primary force. However, the role of the government can have an impact upon Porter's determinants.

From a demand condition perspective, governments need to establish more jobs to reduce unemployment and increase GDP/capita. One way of doing this is to provide incentives for international firms to establish operations within a specific country such as lowering trade barriers. Stimulating the economy by providing opportunities for investment by international firms may reduce high unemployment levels and GDP/capita may increase. By establishing trade relationships with other countries, the firms may be able to use its excess capacity for selling products internationally. Related and supporting industries and the role of the government will be discussed next.

From a related and supporting industry perspective, using resources in two or more related industries may allow the firm to achieve economies of scope. By the government providing financial incentives for firms to expand into related and supporting industries, a firm's resource base can be used to support positions within several industries, and it may be able to leverage its resources to expand into additional, new international markets. As such, economies of scope can be realized within both domestic and international firms. Japan's flexible manufacturing systems permit economies of scope to be realized within both its domestic and international markets. Strategy, structure, and rivalry will be discussed next from a government policy perspective.

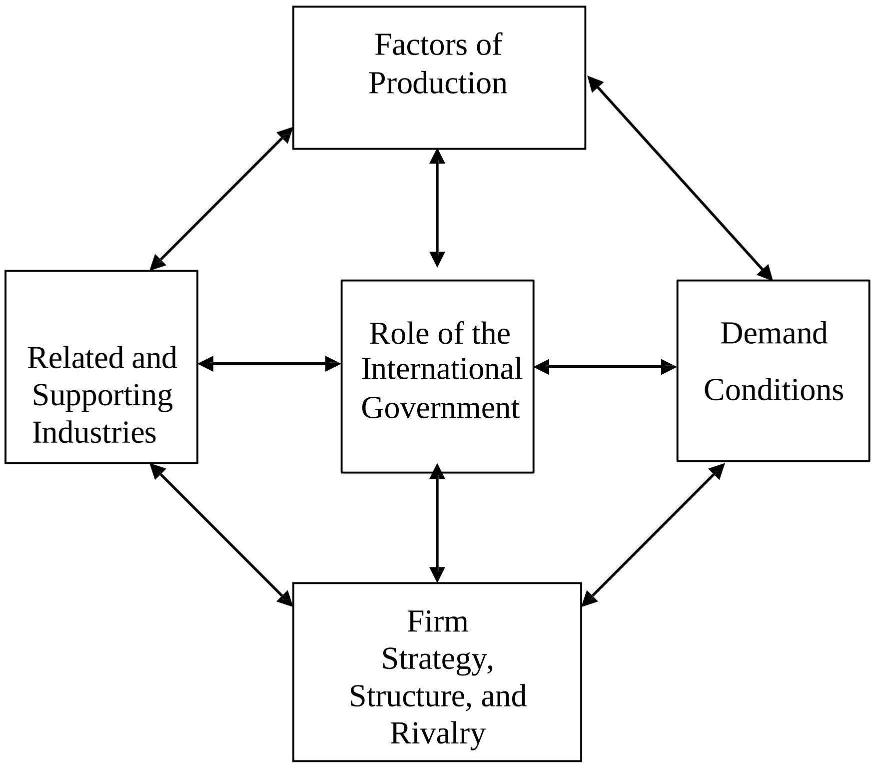
The government may work with other governments to reduce trade barriers with certain markets (e.g. NAFTA, EU). By entering international markets, firms may be in position to alter competition. By establishing product positions within several countries, the firm may be able to generate additional revenue streams. One reason is because international countries may be at different stages of the industry life cycle compared to domestic markets. For example, the tobacco industry is moving into the decline stage of its industry life cycle within the U.S. However, within Pacific Rim countries and the Commonwealth of Independent States (CIS), tobacco firms are at earlier stages of development in terms of the industry life cycle. The role of government from a factors of production perspective will be discussed next.

From a factors of production perspective, the government may need to focus upon building a better infrastructure within its own country. In international markets, the firm may need to develop inbound logistics networks to move raw materials to manufacturing facilities. In addition, firms will need to develop outbound logistics networks to provide the infrastructure needed to move products to customers. In many cases, firms will need to develop both inbound and outbound logistical networks to meet customers' needs in a timely manner. Once these networks are in place, the firm can utilize them for all its products. In this manner, firms develop international distribution infrastructures, which can be used for current products and for new products developed in the future.

The demand for products and services becomes irrelevant if the network to move products to consumers does not exist. Without a well-developed infrastructure, firms from other countries will choose other international markets to expand into. In addition, a country's firms are limited from selling their goods and services to other countries because these products cannot reach a rail, highway, and/or an airport. Problems with infrastructure stifle trade within and between countries. The government needs to focus on infrastructure to relieve bottlenecks.

Porter's diamond has stood the test of time in terms of determining which international markets a firm should enter. This discussion adds value to Porter's model by incorporating the role of the government in which the firm is considering expanding into. International governments can be the brake or accelerator to firm expansion. As shown in Figure 11.3, the government has an impact upon all of Porter's factors. By understanding the role of the government within each international market, firms can make more intelligent decisions upon which countries to enter and which countries not to enter.

Figure 11.3
The Role of Government and International Country Attractiveness



Determination of International Industry Attractiveness

Several criteria can be utilized to determine international industry attractiveness. Some important factors are as follows: (1) state ownership of industry, (2) government intervention within industries, (3) industry competitiveness, (4) industry profitability, (5) degree of product differentiation, (6) presence of large, multi-national firms within the industry, (7) significance of "Not Invented Here" syndrome, and (8) industry growth rates. Each criterion will now be briefly discussed.

If the government owns the industry, international firms cannot achieve a position within it. As such, if the industry is state owned no further consideration should occur.

The second criterion is government intervention within industries. As discussed earlier, while firms in an industry may not be state owned, governments can take actions to support existing firms within the industry. Examples of such actions would be import duties, tariffs, or providing financial support for domestic firms. This is also a criterion that could prevent firms from entering an international industry.

Porter's 5 forces model can be used to determine international competitiveness. If entry barriers are high, an international firm may choose an industry that has lower barriers to entry. If buyers have significant bargaining power, a new entrant would need to enter the industry with a value added product or products. These products may require significant product R&D investment. If products are substitutable, customers within the international industry have no incentive to switch. If suppliers have significant bargaining power, firms entering the industry may have difficulty establishing an inbound logistic network. If existing industry rivalry is significant, new entrants may have difficulty competing.

Industry profitability is a crucial statistic. Firms are in business to maximize earning so that shareholder wealth can appreciate. Some industries are more profitable than others. For example, firms within the U.S. oil industry are achieving much higher earnings than firms within the U.S. commercial airline industry.

The degree to which products of firms within the industry are differentiated implies that the industry may not have reached the maturity stage. From Chapter 1, firms that are marketing differentiated products will most likely be in the growth stage of the industry life cycle. The maturity state occurs when competitors compete upon the basis of price as opposed to differentiation.

The presence of large multi-national firms within the international industry may act as a barrier to entry. If multi-national firms are of sufficient size, they may be generating economies of scale that would allow them to reduce price to combat new entrants. These firms may have sufficient resources to introduce value added features to existing products within the industry. Industries that do not have multi-national firms may be more attractive to new entrants.

If it is important to have products that are manufactured within the international market, it may require firms to engage in Foreign Direct Investment (FDI) within these markets. Brand name of existing firms may be quite significant. For example, because Harley Davidson motorcycles are “made in America”, it is difficult for an international firm to compete within the U.S. heavyweight motorcycle market.

High industry growth rates may indicate that the international industry is in the growth stage of its life cycle. As such, a new entrant may enter the industry and grow as the industry grows. Lower industry growth rates may imply that the industry is in the mature stage.

Table 11.2 illustrates how an industry analysis would be conducted within an international country (A). Industry analysis should be conducted for all industries in all countries a firm is considering entering.

Table 11.2 International Industry Attractiveness Country A					
Criteria	**Weight***	**Score **(Value)*****			
		Industry 1	**Industry 2**	**Industry 3**	**Industry 4**
1. State Ownership †	Yes/No	**Yes**	No	No	No
2. Government intervention†	Yes/No	**Yes**	No	No	No
3. Lack of industry competitiveness	.25	N/A	**5(1.25)**	9(2.25)	**9(2.25)**
4. Industry profitability	.20	N/A	**6(1.20)**	**4(.80)**	**9(1.80)**
5. Degree of product differentiation	.20	N/A	8(1.60)	**5(1.00)**	**8(1.60)**
6. Presence of large, multi-national firms within industry	.15	N/A	9(1.35)	6(.90)	**6(.90)**
7. Lack of "not invented here" syndrome	.10	N/A	9(.90)	**4(.40)**	**8(.80)**
8. Industry growth rate	.10	N/A	3(.30)	6(.60)	6(.60)
Total	1.00		**6.60**	**5.95**	**7.95**
* Weights are assigned by senior management based upon how important one criteria is when compared to another **Scores are based upon a 1 to 10 scale where 1 is poor and 10 is excellent ***Value consists of the weight of each factor multiplied by the firm's score † If yes, this industry should no longer be considered					

Based upon Table 11.2, Industry 1 is state owned. As such, the international government may not allow international firms to compete within this industry. Industry 1 is eliminated from consideration. Industries that are subsidized by the international government should also be eliminated from consideration.

Industry 4 may be the most attractive industry to target within this country. Industry 4 has higher profitability than industries 2 and 3. Industry 4 is much less competitive than Industry 2 and has greater product differentiation than Industry 3. The "Not Invented Here" criterion is also much less significant than Industry 3. Industry 4 does not appear to have a significant number of multi-national firms (criteria 6) that could reduce price if a new entrant enters the industry. Industry 2 does have a large number of multi-national firms. These firms may have significant R&D resources that could produce value added products when the new entrant enters the industry. Based upon the above analysis, a new entrant should consider entering Industry 4 within this country. A firm must now assess its relative business strength within Industry 4.

Determination of Firms' Business Strengths

Table 11.3 addresses a firm's business strength within a specific country and industry. A new entrant's relative business strength versus existing competitors needs to be evaluated before entering the industry. Some of the criteria which impact firm competitiveness within an industry are: (1) firm's financial performance, (2) degree of product R&D required, (3) degree to which large scale production facilities are required, (4) significance of brand name, (5) level of process R&D required, (6) expense of developing distribution channels, and (7) expense of sourcing raw materials. Each of these criteria will now be discussed.

Firms that have strong historical financial performance may be better positioned to negatively impact new entrants. These firms may be able to add value to existing products and/or reduce price while maintaining positive margins.

Firms that have significant funds to devote to product R&D expenditures can more easily adapt products within an industry. If products are not standardized, product R&D must be incurred. Product R&D is primarily focused upon the development of new products or the re-positioning of existing products. If the industry requires new products, R&D expenditures may increase significantly. In addition, marketing research is necessary to determine what specific types of products are required.

It may be necessary to establish large scale operating facilities within the international markets. If competitors within the industry have already established such facilities, they may be able to reduce price to combat the new entrant while maintaining margins.

If existing products have strong brand names it may be difficult to convince customers to purchase products from a new firm. A strong brand name can be a factor in maintaining repeat customer purchasing and act as a barrier of entry. Promotional expenses could be significant for new entrants if existing customers are brand loyal.

In order to sell products within international markets, firms will need to establish a distribution network to reach customers within the foreign market. The firm will need to develop an inbound logistics network to move raw materials to manufacturing facilities. Both inbound and outbound logistics networks may need to be developed.

Once manufacturing facilities have been constructed, investments in process R&D may be required. Process R&D investments are primarily focused upon efficiency. Automation and six sigma are examples of process R&D expenditures. Competitors may have already incurred the design and implementation of such initiatives. In addition, many TQM initiatives can be expensive to implement.

Table 11.3 illustrates how a business strength assessment can be developed within an international industry.

A new entrant may consider entering Industry 4. Based on Table 11.2, we know that this industry has the highest potential of all industries within this country.

Table 11.3
Firm Business Strength Assessment
Country A
Industry 4

Criteria	**Weight***	**Score** (value)*****		
		Firm B	**Firm C**	**Firm D**
1. Firm's financial performance (e.g. ROI, ROE)	.25	**9(2.25)**	**6(1.50)**	**4(1.00)**
2. Product R&D expenditures	.20	**8(1.60)**	3(.60)	2(.40)
3. Completion of construction of large scale facilities	.15	**5(.75)**	**4(.60)**	**4(.60)**
4. Brand name competitor	.15	4(.60)	2(.30)	3(.45)
5. Process R&D spending expenditures	.10	**3(.30)**	**4(.40)**	4(.40)
6. Developed distribution network	.10	**3(.30)**	**4(.40)**	7(.70)
7. Developed raw material sourcing network	.05	7(.35)	7(.35)	2(.10)
Total	1.00	**6.15**	**4.15**	**3.65**

* Weights are assigned by senior management based upon how important one criteria is when compared to another
**Scores are based upon a 1 to 10 scale where 1 is poor and 10 is excellent
***Value consists of the weight of each factor multiplied by the firm's score

This industry (Table 11.3) appears to have one significant competitor (Firm B) and two competitors who have much weaker positions. Firm B has had superior financial results compared to firms C and D. Firm B has invested significant resources to product R&D. The industry appears to be in the growth stage. All firms have not completed construction of large facilities (criteria 3). No firm has a strong brand name position (criteria 4). Distribution network (criteria 6) appears to be under-developed for firms B and C. If the international firm considering entering Industry 4 has significant funds to engage in R&D expenditures and construction of large-scale facilities, the international firm may be able to develop a superior competitive position with respect to firms C and D.

However, Firm B may be a formidable competitor. The potential new entrant should examine the competitive position of all other industries in all other countries it has targeted before making a major commitment to this industry in this country.

Adaptation Versus Standardization

A crucial decision that must be made is whether to produce the same products/services for international markets. If adaptation is not necessary, firms can utilize excess capacity from their domestic operations. Some types of products do not require adaptation for sale in international markets.

Magic markers for use on white boards in classrooms are one example. Levi jeans are another example. Gillette's blades and razors are a third example. In order to determine whether a firm's products/services need adaptation, it is important to obtain customer input within the international market. One way to judge customer receptiveness is to perform focus groups within the international markets the firm is considering entering.

Focus groups are discussions of products/services and competition with customers. A primary benefit of focus groups is that they can determine whether adaptation of products/services will be required to meet the needs of each international market. For example, Coke and Pepsi are beverages that require minor adaptation for international markets. Within markets in South America, the formula for Coke and Pepsi is sweeter than in the U.S. Adaptation becomes expensive; however, if products/services do not meet market needs, they will not be consumed.

Focus groups can provide a current perspective of a country's political/legal environment. Understanding the crucial role the government plays with respect to industries is quite important[20]. For example, governments may impose import duties on certain goods and services. These duties will tend to raise costs for the importing firm. Governments may also control the type of advertising an international firm can employ. For example, France and Italy have banned advertising for tobacco products[21].

The moderator of the focus group can have the participants enter into a discussion concerning competition. The firm considering international entry obtains an unbiased qualitative view as to the nature of competitors and their relative strengths and weaknesses. Another benefit of conducting focus groups in international markets is that firms can access the impact of the "Not Invented Here" (NIH) syndrome[22]. Some markets may not purchase products simply because they are manufactured in markets other than those in which they are consumed. It is very difficult for international firms to sell heavyweight motorcycles within the U.S. because Harley Davidson customers are loyal. Firms have different modes in which to enter international markets.

Determination of International Modes of Entry

International markets can be entered via (1) exporting, (2) licensing or franchising, (3) strategic alliances, (4) acquisitions and/or (5) foreign direct investment. Exporting will be discussed first.

Exporting

After a country has been identified as a viable international market, a firm must determine the best mode of entering that specific market. The entry mode with the lowest level of risk is normally exporting. The firm uses its excess domestic production capacity to sell products/services in selected international markets. Because the firm is manufacturing domestically, the international distribution network may have added costs. For example, a U.S. firm that decides to enter China via exporting must develop a network to move products from the U.S. to China.

In addition to transporting products to international markets, firms must then develop a distribution infrastructure within the market. In addition, the actual selling process within the international market must be developed. An international sales staff or agents are normally utilized for selling in international markets. This staff needs to be hired from each country. The primary reason is that sales personnel who are based in international markets are more familiar with the role of the government, the competition, and the customer base.

To facilitate international trade, the formation of agreements between countries has resulted in a reduction of trade barriers. The North American Free Trade Agreement (NAFTA) is one example. NAFTA has greatly reduced the barriers to trade between the United States, Mexico and Canada. NAFTA went into effect in 1994[23].

Much of the NAFTA agreement has been centered on trade between the U.S. and Mexico. The value of goods traded between the U.S. and Mexico was $267 billion in 2004[24]. Mexico is of critical importance to the U.S. because it is the 2nd largest exporter of oil to the U.S.[25]. Over $^{1}/_{3}$ of Mexico's trade comes from oil exports[26]. In 2004, Mexico surpassed Saudi Arabia as the 2nd largest supplier of exported oil. Mexico is also a market that provides favorable labor conditions.

Other global developments have provided incentives for exporting. The creation of the European Union (E.U.) has reduced trade barriers between the 27 members. Table 11.4 identifies the members of the E.U.

Table 11.4
Members of the European Union

Austria	Latvia
Belgium	Lithuania
Bulgaria	Luxembourg
Cyprus	Malta
Czech Republic	Netherlands
Denmark	Poland
Estonia	Portugal
Finland	Romania
France	Slovakia
Germany	Slovenia
Greece	Spain
Hungary	Sweden
Ireland	United Kingdom
Italy	

These members of the E.U. have a gross domestic product of $38.4 trillion[27]. This compares to the gross domestic product of NAFTA of $11.4 trillion[28]. These 10 new nations also provide a connection between Western Europe and Russia.

Russia is the sixth most populous nation, a nuclear power, and a large player in the global oil industry. Russia's oil industry is important to all countries. Its oil and gas reserves are greater than Exxon/Mobile, Petro-China, Royal Dutch Shell and Chevron Texaco[29].

Licensing/Franchising

Firms may also enter international markets by licensing. Licensing occurs when one firm, the licensor, allows another firm, the licensee, to use its intellectual property to generate sales. Intellectual property may include, but is not limited to, product R&D or process technology, other types of technology, brand names and/or trademarks. Licensees pay royalties to licensors. The licensor can gain access to international markets with minimal investment. Licensing may allow the licensor to enter international markets where acquisitions or direct foreign investment are not permitted by the government. Licensing is not without risk because technology transfer can occur. Research In Motion (RIM), the maker of Blackberry Wireless e-mail devices, has been sued by NTP Inc. for unwanted technology transfer[30]. RIM has agreed to pay $450 million to settle the dispute[31]. Licensing is also important because of property rights.

Intellectual property rights have affected the international cell phone industry. Nokia, a worldwide leader in cell phones, licenses the intellectual property of 3G technologies at much lower rates than rivals such as LG Electronics[32]. Because Nokia holds many of the intellectual property rights, it holds a cost advantage over rivals. It is possible that Nokia could sell 3G phones for as much as $30 less than rivals[33]. One reason Sony entered into a joint venture with Ericsson was to further develop intellectual cell phone property rights. Licensing does not only involve intellectual property rights. Products themselves can also be licensed.

Tate & Lyle PLC (London) has a licensing agreement with Johnson & Johnson to market and distribute Splenda[34]. Splenda is a zero calorie sweetener that tastes closer to sugar than rival products. Coke, Pepsi, and Cadbury Schweppes have reformulated most of their diet cola products with Splenda[35].

Franchising is a form of licensing in which a company (the franchiser) grants a franchisee the right to market its products/services within an international market. The difference between licensing and franchising concerns operations within the international market. The franchisee agrees to conduct business in accordance with the franchiser's standard of operation.

Fast food chains utilize a great deal of franchising to develop positions within international markets. In 2005, McDonald's had franchises in 119 countries[36]. Yum Brands, which consists of KFC, Taco Bell, Pizza Hut, A&W Root Beer, and Long John Silvers, has over 13,000 franchises worldwide[37]. While franchising has resulted in significant growth for fast food and hotel chains (e.g. Holiday Inn, Marriott), there are significant risks. To prevent opportunistic behavior on the part of the franchisee, the franchiser needs to control the point of differentiation. Otherwise, the franchisee may become a direct competitor of the franchiser. For example, Coke has expanded internationally via franchising. To maintain control of its many franchising firms, Coke exports the syrup. As such, this action prevents the franchisee from becoming a direct competitor. The role of government can also create risks for franchisers.

When Venezuelan President Hugo Chavez changed monetary policies, franchisers were not able to collect royalties[38]. Such political risk can create an unfavorable position for franchisers. To assist firms in deciding where to enter into franchising agreements, consulting firms have developed factors that are crucial for franchising success. Factors such as market size, ease of entry and government corruption are measured on a country-by-country basis. Countries that provide the best franchising opportunities are fully developed markets such as the United States, Great Britain, Australia, and Germany[39]. Developing countries such as Malaysia, Poland, India, Russia, and Indonesia provide less favorable conditions for franchising opportunities[40]. Strategic alliances are another mode of international entry.

Strategic Alliances

Strategic alliances are partnerships between firms that pool assets to achieve competitive advantage. Strategic alliances can be categorized as either scale or link alliances. Scale alliances allow partners to more fully utilize the excess capacity of their resource base[41]. The 3 major global airline alliances, Star, OneWorld , and Skyteam, allow partners to utilize the aircraft of other partners to increase global coverage and reduce costs.

Link alliances consist of firms that contribute different resources[42]. Samsung has an alliance with Deutsche Telekom AG to collaborate on mobile digital broadcasting[43]. Samsung will provide terrestrial mobile digital broadcasting in return for Deutsche Telekom AG's assistance in gaining access to the German market[44]. Link alliances have been referred to as "Trojan horses" [45]. Since firms are contributing different resources, the possibility of technology transfer also exists.

In some cases, both firms jointly working on new technology can minimize technology transfer. Boeing and Lockheed Martin are jointly working on a project with the U.S. government to develop new rocket technology[46]. This $4 billion project is to develop lower cost rocket launchers for launching military and surveillance aircraft. General Motors and Toyota have an alliance to develop technology that will lead to gasoline-electric hybrid cars[47]. This technology will benefit both auto manufacturers.

Siemens entered into a strategic alliance with the Russian rail monopoly, Russian Railways, to build trains for Russia[48]. Siemens provides the technology for building the high-speed trains and Russian Railways provides the infrastructure. In this case, while the technology for building high-speed trains may be transferred to Russian Railways, the risks are not significant because Russian Railways controls all of the rail business in Russia[49]. In addition, Russian Railways has no interest in expanding beyond Russia.

Strategic alliances do have a down side. Firms that engage in alliances may withdrawal from these partnerships. If firms withdraw, partners won't have access to some international markets. For example, if United Airlines goes out of business, its partners in the Star global airline alliance will not have access to United's extensive U.S. based operating network. Currently, United Airlines (which acquired Continental Airlines in 2010) is the second largest passenger airline (American Airlines is first) in the world[50].

Acquisitions

Acquisitions are a mode of international entry by which the acquiring firm buys all or a controlling interest in a target firm. These are referred to as cross border acquisitions. In some cases, acquisitions may result in redundant assets. When Air France acquired KLM, Air France obtained KLM's fleet; Air France did not need all of KLM's aircraft[51]. When DHL acquired Airborne in 2003, DHL did not need all of Airborne's operating facilities. Acquisitions do allow firms access to new markets and may create financial incentives.

General Electric's acquisition of Bombardier's (Canada) sports and recreational vehicle finance division allowed G.E. to expand its commercial finance division[52]. For Bombardier, the acquisition calls for G.E. to assume $1 billion in debt and provides $3.35

billion for Bombardier to pay short-term debt and provide financing for new airplane ventures[53]. Acquisitions can also provide firms with access to high growth markets.

The South American beer industry has attracted several international firms. Interbrew's (Belgium) acquisition of AmBev (Brazil) gives Interbrew access to most South American markets. South African Brewers $6 billion acquisition of Colombian Brewer GrupoEmpresarial provides similar access for South African Brewers.

With an international acquisition the acquiring firm has access to all of the target's resources. Most important are knowledge-based resources with respect to competition, government relations, raw materials, distributors, financial resources, and customers within international markets.

Acquisitions also have downsides. For example, international government regulations may not permit firms from establishing a position within their markets via acquisition. For example, the Russian oil and power industries are totally controlled by the Russian government. Only Russian firms have significant market shares[54]. The top 6 producers are all Russian firms: Lukiol, Rosneft, TNK, Surutneftegnz, Sibmept, and Yokos.

Foreign Direct Investment

Foreign direct investment (F.D.I.) is an entry strategy in which a firm establishes a position within a country without partners. Foreign direct investment may be a necessary strategy to compete effectively within some international markets. Foreign direct investment eliminates product entry costs that may be imposed by international governments.

Foreign direct investment can lead to higher levels of employment within international markets. Many U.S. based firms are outsourcing management information system jobs to India. Pharmaceutical firms are outsourcing some aspects of R&D operations to China[55]. Due to the extensive outsourcing by firms into China, Chinese ports are very congested. With trade between China and the U.S. expected to double by 2020, the U.S. may assist in building new Chinese ports to support the increased trade.

In addition, manufacturing firms are outsourcing many assembly operations to Mexico. As outsourcing employment presents opportunities within international markets, the foreign country's economy may improve. The downside is that many thousands of U.S. jobs, formerly performed within the U.S., are lost each year. On the other hand, firms that utilize foreign direct investment into the United States create employment opportunities for U.S. citizens. Foreign direct investment is a mode of entry that contains significant risk.

Firms that utilize foreign direct investment may be affected by very volatile economic conditions within many markets. Foreign direct investment is effected by political and international government policy. The Gulf Wars have created uncertainty with respect to investing in Middle Eastern markets. South American markets are also volatile. In 1994, the Mexican peso was devalued. In 1999, the Brazil real was devalued. In 2001, Argentina was struck by a financial crisis. In 2005, both Mexico and Brazil were experiencing high inflation.

Competition within International Markets Intensifies

As firms invest within international markets, a more competitive international environment is created. The industry life cycle and international life cycle literature explains that as a competitive environment becomes more saturated, firms begin to focus upon price as opposed to differentiation. This focus implies that the lowest cost provider will have an advantage. As firms compete on price, profit margins tend to be reduced. Costs saving measures such as increasing scale, implementing TQM initiatives, and/or increasing automation are all processes that are available to all competitors who have funds to invest. These approaches will tend to create highly efficient firms. As competition on price intensifies, firms will need to determine additional ways of reducing costs.

Relocate to Low Cost Markets

Firms, to reduce costs further, may need to move production to less developed countries. While the variable costs (e.g. labor) are significantly less in developing countries, firms may still need to invest in plant and equipment. In addition, firms must develop inbound logistic networks to provide an infrastructure for raw materials to reach the new plant. Firms will also need to develop outbound logistics to coordinate movement of products to consumers in a timely matter. In the long run, this network may provide for overall lower costs. However, the fixed costs and distribution infrastructure that must be developed are expensive. Also, if unions represent your employees, the transition to a developing country for manufacturing and distribution activities may not be easily implemented.

If firms successfully produce in low cost markets, the economy may grow to the point where customers in the low cost market may have obtained sufficient buying power to consume your products/services. As low cost markets become more developed, the infrastructure will tend to become more extensive. With improvements in distribution, firms may learn to develop distribution infrastructures in additional global markets quicker and cheaper.

New Innovation in Home Markets

The international life cycle starts with innovation in the firm’s home market and ends with firms producing in low cost markets. Firms begin with products/services that are differentiated and end trying to obtain a cost advantage. To facilitate further growth, the firm will need to develop a new innovation in its domestic market that may result in a second international life cycle.

If firms do establish international positions, they may more fully leverage their assets to generate returns from countries that are at different stages of the international life cycle. This relationship between stages of industry evolution and the international life cycle is illustrated in Table 11.5.

Table 11.5 International Life Cycle and Industry Evolution	
Stage of Industry Evolution	**International Life Cycle Stage**
Introduction	Innovation in home market
Growth	Expand to total obtain coverage of domestic market
Growth	Exporting, licensing, strategic alliances, acquisitions, and/or foreign direct investment to enter international markets
Maturity	Competition within international markets intensifies
Maturity/ Decline	Relocation to developing markets to achieve low cost position

If firms do not develop international markets, firms must continuously engage in new product R&D. Establishing positions in international markets allows the firm to obtain returns at all stages along the life cycle. Further, once an international infrastructure has been developed, it may be utilized for all subsequent products/services.

Emerging Markets

CEO Oberhelman discussed the strength of emerging markets. We now examine emerging markets from a quantitive perspective. Table 11.6 shows the position of the top 20 emerging markets in 2013 based upon data obtained from (1) Bloomberg's financial market statistics (2) IMF forecasts and the (3) World Bank.

Table 11.6 Top 20 Emerging Markets (2013)				
Overall Rank	**GDP Growth Percentage**	**Government Debt as a Percentage of GDP**	**Ease of Doing Business Rank**	**Total Score**
1. China	46	15	91	77
2. South Korea	23	27	8	67
3. Thailand	26	49	18	58
4. Peru	27	17	43	57
5. Czech Republic	21	45	65	53
6. Hungary	22	54	12	51
7. Turkey	21	36	71	51
8. Chile	24	13	37	50
9. Russia	26	11	112	49
10. Indonesia	31	20	128	48
11. Columbia	22	29	45	47
12. Poland	21	54	55	46
13. Namibia	22	30	87	44
14. Zambia	31	29	94	43
15. South Africa	20	43	39	43
16. Mexico	17	43	48	42
17. Brazil	22	57	130	40
18. Hungary	15	76	54	40
19. Morocco	27	57	97	39
20. Philippines	20	37	138	38

Based upon the data contained in Table 11.6, a number of factors have emerged with respect to emerging markets. First, China is no longer an emerging market. It has the second highest GDP (2^{nd} to the U.S.) in the world. Second, the table shows a wide dispersion of emerging markets from around the globe who are replacing the BRIC countries. The BRIC identification of major emerging markets appears to have changed. Brazil is ranked 17 overall. This government debt as a percentage of GDP is high (57 percent). Brazil is tied with Morocco for the county carrying the 2^{nd} highest debt load of the 20 emerging markets studied. Only Hungary has a higher debt load (76).

In addition, only the Philippines (138) is more difficult to do business in. Fourth, India does not make the 20 top emerging markets. Remember, Mr. Oberhelman stated that in India "I do not see India challenging the U.S. or China as a competitive power." Fifth, Russia is ranked 9. It is very difficult to do business in (112). Only Indonesia (128), Brazil (130) and the Philippines (138) are more difficult countries to do business in.

Discussion Questions

1. Explain why international expansion is necessary.
2. What factors encourage international expansion?
3. Explain the difference between regulated and deregulated industries.
4. Discuss Porter's determinates of international country attractiveness.
5. Explain the modes of international entry.
6. Explain the risks with respect to foreign direct investment (FDI).
7. Explain what happens when a firm does not expand into international markets.
8. Explain the role of government with respect to Porter's determinants of international country attractiveness.
9. What will be the most popular outsourcing locations in 2011?

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IKEA Mini Case

IKEA primarily manufactures unassembled furniture. Because of this fact, IKEA is able to keep prices low. The customer pays for shipment of the furniture from point of sale to the customer's final destination. This approach allows IKEA to follow a cost leadership strategy. IKEA vision statement maintains that "IKEA will offer a wide range of well-design, functional, home furniture products at prices so low that as many people as possible can afford them." IKEA offers prices that are 30 to 50 percent lower than fully assembled competing products. This is a result of large-quantity purchasing, low-cost logistics, store location in suburban areas, and the do-it-yourself approach. IKEA's prices do vary from market to market, largely because of fluctuations in exchange rates and differences in taxation, but price positioning is a key point IKEA markets. IKEA targets its products to "young people of all ages."

From a promotion perspective, IKEA primarily utilizes catalogs. IKEA utilizes a global distribution network so that the manufacturing locations in Table 2 can meet the needs of its customer base, which is identified in Table 1.

Table 1 shows sales per region. The Nordic counties (Finland, Sweden, Norway, and Denmark), other Western European markets, and Eastern European countries account for 73 percent of IKEA revenue. North America accounts for 15 percent while Asia and Australia account for 5 percent of sales.

Table 2 shows manufacturing per region.While Western Europe (including Nordic countries) account for 49 percent, Asia (30 percent) and Eastern Europe (18 percent) account for substantial manufacturing capacity.

Table 1
Sales Per Region

Sales Per Region	**Percent**
Nordic Countries (Finland, Sweden, Norway, Denmark)	**33**
Other Western European Countries	**30**
Eastern Europe	**13**
North America	**15**
Asia and Australia	**5**
Other	**4**
Total	**100**

Table 2
Manufacturing Per Region

Manufacturing Per Region	**Percent**
Western Europe (Including Nordic Countries)	**49**
Asia	**30**
Eastern Europe	18
North America	3
Total	100

Discussion Question:

a. How and where should IKEA expand in the future?

Chapter 12

Global DNA

Learning and Assessment Goals

6. Understand what decisions firms need to make in a competitive, international environment.

7. Understand how these decisions should be implemented in this changing environment.

8. Use scenario analysis to predict decisions by competitors.

9. Understand how to forecast sales in changing conditions.

In Chapter 12, we discussed international strategy. This topic is of crucial importance because the 30 firms which make up the Dow Jones Index generate more money internationally than they do domestically. Capsim now has a totally integrated international simulation. It is called Global DNA and it is outstanding because it shows how an international strategy can be designed and implemented over time. I am not aware of any other international simulation which provides how the ability to integrate an international strategy over time in a global, competitive environment. Let me show you how it works.

Deciding where and how to expand is of crucial importance in international markets. Capsim has designed the simulation for three primary markets. The Americas is viewed as a mature economy with a stable political environment. Europe is a highly developed, technologically advanced and a high income economy. This market is experiencing steady economic growth. Asia Pacific consists of emerging markets with relatively low income and high economic growth.

To develop these topics Capsim has developed a “Global DNA” simulation. The key to understanding this simulation is to understanding the “Globe”. As stated in the Global DNA’s Manager Guide, “the Globe provides a detailed look inside the entire industry”. The following flowchart will be helpful as we begin to understand how and what decisions are made within Global DNA.

Competitive Landscape

Table 1 identifies the size and growth for each segment.

Table 1a
(Units)
Size By Region

Segment	Americas	Europe	Asia Pacific	Total
Budget	5838	1994	553	8385
Performance	3195	697	216	4108

Source: Global DNA Managers Guide

Table 1b
(Percentage)
Growth Rate By Region

Segment	Americas	Europe	Asia Pacific
Budget	6	18	43
Performance	13	31	49

Source: Global DNA Managers Guide

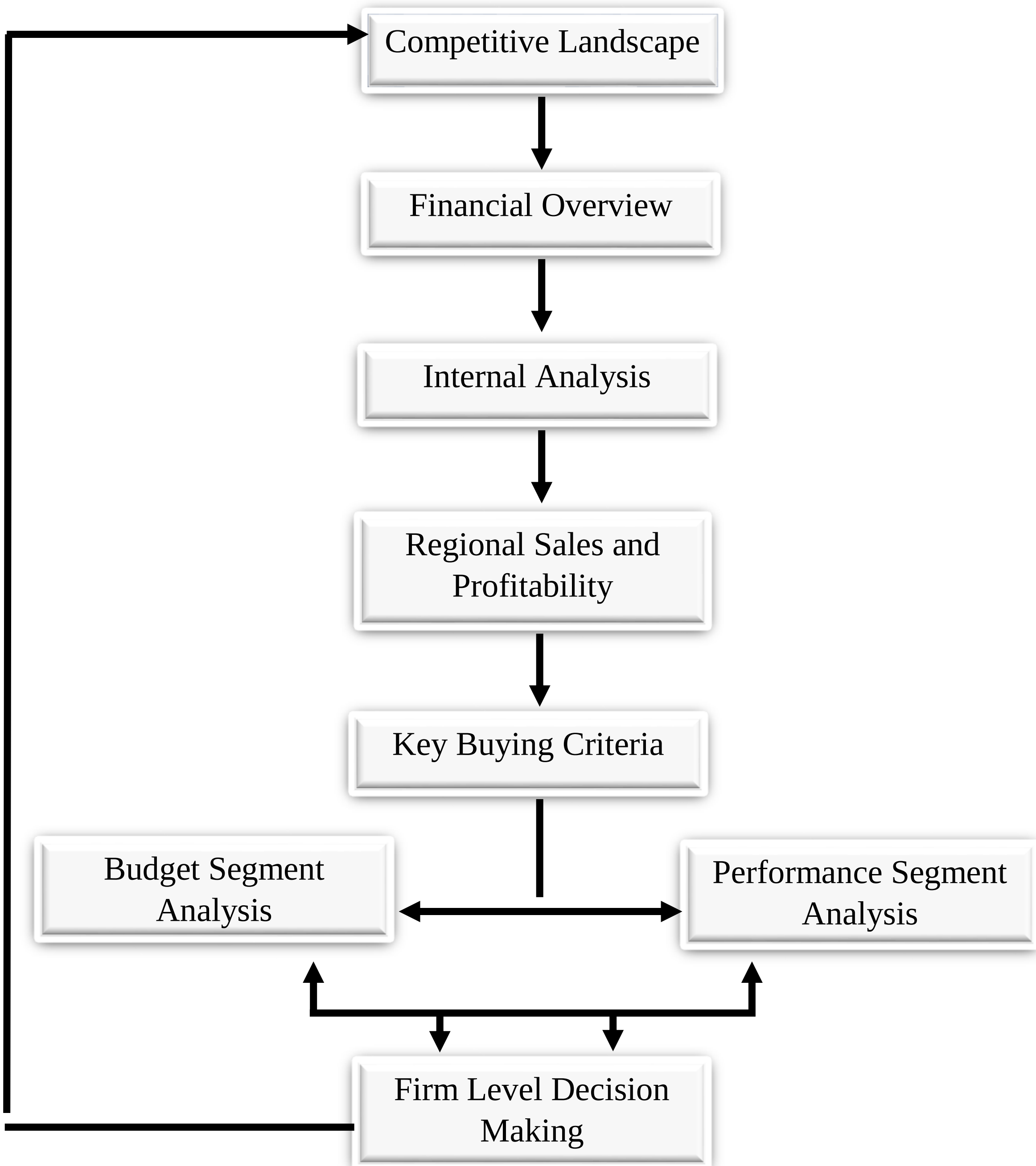
The primary document for decision making in this simulation is called the Globe. Let us use an example from the Globe for a round which has just been completed.

Table 2a shows market share data by region.

Table 2a Market Share by Region by Firm						
Market Share	**Andrews**	**Baldwin**	**Chester**	**Digby**	**Erie**	**Ferris**
Americas	2.7%	**28.3%**	16.5%	12.2%	18.5%	**22.0%**
Europe	4.6%	**21.3%**	16.7%	19.1%	16.0%	**22.2%**
Asia Pacific	8.0%	0%	**35.0%**	**23.9%**	0%	**33.1%**
Total	4.2%	21.0%	20.1%	16.3%	14.3%	24.1%

Table 2a identifies the market share, by region, for each firm. Andrews has a position in each region but its market share in each region is significantly lower than other competitors. Baldwin and Ferris have significant market shares in the largest geographic regions: Americas and Europe. Ferris also has a position in the Asia Pacific market. Ferris is the market share leader in Europe. Erie does not have a position in Asia Pacific. Chester, Digby, and Ferris all have position in Asia Pacific. Chester, Digby, and Ferris all have significant market share positions in Asia Pacific.

Decision Making for Global DNA



Financial Overview

Table 2b shows the stock market summary for each firm.

Table 2b Stock Market Summary					
Company	**Close**	**Change**	**Shares**	**Market Cap**	**EPS**
Andrews	$12.69	($2.89)	2,484,774	$30	$0.68
Baldwin	$37.59	$11.84	4,767,652	$179	$3.00
Chester	$43.76	$6.42	2,914,718	$128	$3.46
Digby	$18.01	($3.24)	4,147,094	$75	$0.32
Erie	**$79.92**	$17.87	**2,400,000**	**$192**	**$10.43**
Ferris	$20.64	$4.12	3,456,000	**$71**	$1.30

As with the Capstone Simulation, stock price is primarily calculated using earnings per share.

Erie has the highest stock price at the end of this round. One reason is that it only has the smallest share of shares outstanding. As the number of shares of outstanding stock increases, the earning per share ratio tends to decrease.

In addition, Erie would be the most difficult position for another firm to acquire based upon its market capitalization ($192 million).

Table 3 Financial Summary						
Cash Flow Statement Survey	Andrews	Baldwin	Chester	Digby	Erie	Ferris
Cash Flows From Operating Activities						
Net Income (Loss)	$1,625	$14,310	$10,091	$1,308	$25,036	$4,479
Inventory	**($10,314)**	($9,348)	($1,400)	$8,689	($35)	($1,269)
Net Cash From Operations	($1,958)	$9,620	$12,780	$16,393	$25,350	$5,370
Cash Flows From Investing Activities						
Plant Improvements (Net)	$0	**($53,200)**	$0	($8,000)	$0	$0
Cash Flows From Financing Activities						
Dividends Paid	($2,385)	$0	$0	$0	($361)	$0
Sales of Common Stock	$0	**$20,000**	$0	$0	$0	$9,520
Purchase of Common Stock	($1,948)	$0	$0	$0	$0	$0
Cash From Long Term Debt Issued	$0	$0	$0	**$26,000**	**$11,585**	$0
Cash From Emergency Loan	$6,919	$0	$0	$0	$0	$0
Net Cash From Financing Activities	($1,813)	$33,600	($4,400)	($1,516)	$14,294	$21,165
Net Change In Cash Position	($4,915)	($10,496)	$7,456	$6,122	$39,192	$25,723
Ending Cash Position	$8,850	$13,489	$48,374	$45,940	$46,121	$60,831

The issuance of long-term debt and/or the sale of common stock are solid ways of financing expansion. Baldwin made the highest capital expenditure by increasing its size of

$53,200. This expansion partially funded from the issuance of $20,000 million shares of stock.

Digby and Erie have chosen an alternative way of financing expansion. Both firms utilized long-term debt to finance expansion.

Revenue and profit data is shown in Table 4. Erie is the market leaders in terms of cumulative profitability.

Table 4
Financial Data by Firm

Financials ($000)	**Andrews**	**Baldwin**	**Chester**	**Digby**	**Erie**	**Ferris**	**Industry Avg.**
Sales	**$39,236**	$163,568	$165,139	$121,898	$154,224	$150,629	**$132,449**
Profits	$1,625	$14,310	$10,091	$1,308	$25,036	$4,479	$9,475
Cumulative Profit	$14,117	$35,368	$36,053	$15,692	**$85,165**	$14,257	$33,442
Emergency Loan	**$6,919**	$0	$0	$0	$0	$0	$1,153

From Table 4, Andrews has incurred an emergency loan of $6,919 million. This will severely restrict Andrews ability to grow in the future. Andrews needs to grow significantly because its sales for the year were $39,236. The industry average is $132,449. All other firms have significantly higher sales.

Internal Analysis

We now move inside the firm. An analysis of production can provide us with important information. We will now review the production information from this round. It is shown in Table 6a and 6b.

We will now review Table 6a.

With capacity of 5200 units and an automation level of 7.5, it would appear that Baldwin is taking a cost leadership strategy. Erie, with an automation level of 3.6, would be focusing upon more performance segments.

Table 6a
Plant Details

	Andrews	Baldwin	Chester	Digby	Erie	Ferris
Capacity	2,600	5,200	3,000	4,000	5,000	5,000
Automation	6.0	7.5	5.0	6.0	3.6	5.0

Baldwin has significant inventories in its Baker product in the Americas in and Europe. Chester (Cake) has significant inventories in the Americas segment. Digby (Daze) has significant inventory in Europe. Erie (Eat, Enter) has significant inventory in the Americas and moderate inventory in Europe (Eat). Ferris (Fast) has inventory in the Americas.

Table 6b						
Name	Units Sold	Production	Outsource	Inventory Americas	Inventory Europe	Inventory Asia-Pacific
Amaze	668	910	0	**217**	**298**	**233**
Answer	424	866	0	97	82	263
Baker	2781	2078	**900**	**591**	**481**	0
Bucky	1369	1683	15	60	**336**	0
Bear	1264	1386	18	4	135	0
Cake	2936	1117	**1615**	**516**	163	34
Chris	2249	1852	**697**	**227**	**221**	**201**
Daze	3570	3346	0	0	**398**	56
Delta	653	413	0	16	0	0
Eat	1458	1089	0	**381**	**179**	0
Enter	1511	1881	0	**391**	68	0
East	722	721	0	0	0	0
Fast	3691	2920	**750**	**238**	72	102
Fierce	2545	2029	**650**	**235**	63	66

Baker, Cake, Chris, Fast, and Fierce are using significant outsourcing. Based upon their inventory levels, additional production may not be a wise decision for any of these firms.

Regional Sales and Profitability

The regional income statement will review the activities within the three dominant market segments (Americas, Europe, and Asia Pacific.) Erie has a dominant position within the Americas segment (Table 7a) with sales of $108 million and net profit of $20 million. While its revenue is approximately the same as Baldwin, its net profit is 2 ½ times the size of its nearest competitor (Baldwin at $7 million).

Table 7a Americas						
	Andrews	**Baldwin**	**Chester**	**Digby**	**Erie**	**Ferris**
Sales	$12,716,092	**$111,982,095**	$72,728,764	$46,393,251	**$108,968,091**	$69,400,635
Net Profit	($3,035,291)	**$7,351,895**	$6,309,474	($5,234,121)	**$20,996,494**	$2,773,523

Europe is also a competitive market (Table 7b). All firms except Andrews have significant positions within this market. Baldwin dominates this market from a profit perspective.

Table 7b Europe						
Sales	**$10,735,122**	$51,585,702	$39,966,792	$41,181,805	$45,255,651	$40,759,462
Net Profit	$1,488,296	**$6,957,849**	$4,806,746	$2,542,842	$4,039,163	$1,088,201

The Asia Pacific market (Table 7c) appears to be a market dominated by Chester and Digby. Erie and Baldwin do not have positions in this market segment. Ferris is not competing in this market from a profit perspective.

Table 7c Asia Pacific						
Sales	$15,785,126	$0	$52,443,567	$34,323,315	$0	$40,469,228
Net Profit	$3,172,410	$0	$1,974,496	$3,999,123	$0	$617,436

Key Buying Criteria

This simulation focuses upon two primary segments; the budget segment and the performance segment. The key buying criteria for each market is contained in Table 1.

Table 8 **Key Buying Criteria By Segment By Market**	
Budget Segment	**Performance Segment**
Americas – Budget Segment	**Americas – Performance Segment**
+ Price, $15-$35 – importance: 55%	+ Ideal Position – importance: 39%
+ Age, 3 years – importance: 19%	+ Age, 0 years – importance: 32%
+ Ideal Position – importance: 17%	+ Service Life, 17,000-23,000 – importance: 19%
+ Service Life, 14,000-20,000 – importance: 9%	+ Price, $25-$45 – importance: 10%
Europe – Budget Segment	**Europe – Performance Segment**
+ Price, €15-€35 – importance: 50%	+ Ideal Position – importance: 43%
+ Ideal Position – importance: 21%	+ Age, 0 years – importance: 33%
+ Age, 3 years – importance: 15%	+ Service Life, 17,000-23,000 – importance: 16%
+ Service Life, 14,000-20,000 – importance: 14%	+ Price, €25-€45 – importance: 8%
Asia Pacific – Budget Segment	**Asia Pacific – Performance Segment**
+ Price, S$15-S$35 – importance: 60%	+ Ideal Position – importance: 41%
+ Ideal Positon – importance: 14%	+ Age, 0 years – importance: 28%
+ Service Life 14,000-20,000 – importance: 14%	+ Service Life, 17,000-23,000 – importance: 20%
+ Age, 3 years – importance: 12%	+ Price, S$25-S$45 – importance: 11%

Source: Global DNA Managers Guide

Price is the most important key buying criterion (Table 8) in the Americas region for budget products. Price represents 55 percent of the customer's buying criteria. Age (3 years) represents 19 percent of the customers' buying criteria. The "ideal position" for the budget products have a 17 percent importance to the customer. Ideal positions for the budget product in the Americas, Europe, and Asia Pacific for this specific round are 7.3 for speed and 7.3 for accuracy.

Budget Segment Analysis

Table 9 identifies the top products in the budget segment for the Americas.

Table 9 Top Products in Budget: Americas							
Region	**Name**	**Units Sold**	**Price**	**Accuracy**	**Speed**	**Service Life**	**Age**
Americas	Baker	**1,928**	**$26.00**	7.0	7.0	15,000	3.7
	Fast	1,613	$24.00	7.3	6.8	14,000	**3.0**
	Daze	1,413	$25.00	7.0	7.0	20,000	2.2
	Fierce	1,395	$22.00	5.8	5.8	14,000	3.9
	Chris	973	$27.25	7.3	7.3	20,000	1.8
	Bucky	289	$30.00	9.1	9.2	20,000	1.1
	Answer	172	$27.00	6.8	6.8	14,000	0.6
	Bear	27	$34.00	9.8	9.8	20,000	1.3
	Amaze	3	$42.00	9.6	9.6	19,000	0.9

Baker is the market leader within this segment with 1928 units sold. This product has a price of $26. The price range for this segment is $12.50-$32.50. Fast hold the 2nd highest market share. Fast’s age is right on 3.0. 3.0 is the optimal age for this segment.

Table 10 identifies the top products in the budget segment for Europe.

Table 10 Top Products In Budget: Europe							
Region	**Name**	**Units Sold**	**Price**	**Accuracy**	**Speed**	**Service Life**	**Age**
Europe	Daze	**1,203**	**€ 31.35**	**7.0**	**7.0**	20,000	2.2
	Fast	1,078	**€ 27.50**	7.3	6.8	14,000	**3.0**
	Baker	853	**€ 30.80**	**7.0**	**7.0**	15,000	3.7
	Chris	678	€ 31.35	**7.3**	**7.3**	20,000	**1.8**
	Fierce	531	€ 28.60	5.8	5.8	14,000	3.9
	Answer	187	€ 29.70	6.8	6.8	14,000	0.6
	Delta	26	€ 41.80	8.6	8.6	23,000	0.8
	Amaze	7	€ 41.80	9.6	9.6	19,000	0.9

Daze is the market leader with respect to the top products in budget in Europe. Daze sold 1,203 units. Daze has a competitive price (€ 31.35), solid positioning (7.0 for accuracy and 7.0 for speed). Its age is 2.2 years. Price (50%) and age (21%) make up 71% of the customer's buying criteria in this segment in this region.

Table 11 identifies the top products in the budget segment for the Asia Pacific region.

Table 11 Top Products In Budget: Asia Pacific							
Region	**Name**	**Units Sold**	**Price**	**Accuracy**	**Speed**	**Service Life**	**Age**
Asia Pacific	Fast	1,000	**S$25.00**	**7.3**	**6.8**	14,000	**3.0**
	Daze	954	S$27.50	7.0	7.0	20,000	2.2
	Fierce	619	S$25.00	5.8	5.8	14,000	3.9
	Chris	598	S$28.00	7.3	7.3	20,000	1.8
	Answer	66	S$32.00	6.8	6.8	14,000	0.6
	Delta	63	S$37.80	8.6	8.6	23,000	0.8
	Amaze	4	S$42.00	9.6	9.6	19,000	0.9

Source: Global DNA Managers Guide

Fast is the market leader. Fast has the most competitive price (S$25.00), it is right at the ideal age, and its positioning is close to the ideal spot (7.0 for accuracy, 7.0 for speed). Price and positioning make up 74 percent of the key buying criteria for the Asia Pacific Region in the budget segment.

Performance Segment Analysis

Let us now overview the top products in performance segment. We will start with the Americas region.

Table 12 Top Products In Performance Segment							
Region	**Name**	**Units Sold**	**Price**	**Accuracy**	**Speed**	**Service Life**	**Age**
Americas	**Cake**	1,502	**$35.00**	**9.9**	**9.9**	**21,000**	**1.1**
	Eat	1,186	**$43.25**	**10.2**	**9.5**	**17,000**	**1.1**
	Enter	1,099	**$43.79**	**9.7**	**10.3**	**17,500**	**1.0**
	Bucky	577	$30.00	9.0	9.0	20,000	0.8
	Amaze	375	$33.00	9.0	9.0	19,000	1.9
	Bear	370	$34.00	9.3	9.3	20,000	0.9
	Delta	97	$43.00	8.0	8.0	21,000	1.0
	Chris	3	$28.00	6.8	6.8	20,000	2.1
Europe	**Cake**	**500**	€ 40.00	**9.9**	**9.9**	**21,000**	**1.1**
	Eat	**497**	**€ 43.50**	10.2	9.5	17,000	**1.1**
	Bear	**384**	**€ 41.00**	**9.3**	**9.3**	**20,000**	**0.9**
	Bucky	**355**	€ 39.00	9.0	9.0	20,000	**0.8**
	Amaze	256	€ 34.00	9.0	9.0	19,000	1.9
	Delta	59	€ 42.50	8.0	8.0	21,000	**1.0**
Asia Pacific	**Cake**	681	S$38.52	9.9	9.9	21,000	1.1
	Amaze	328	S$34.50	9.0	9.0	19,000	1.9
	Delta	55	S$43.47	8.0	8.0	21,000	1.0
	Chris	1	S$32.20	6.8	6.8	20,000	2.1

In the Americas, the Cake product has the highest market share. Its positioning (9.9 accuracy) and (9.9 speed) is close to the optimal positions (10.2 accuracy and 10.2 speed). It has a relatively new age (1.1 years) and its service life is 21,000. Together, these three buying criteria (positioning, age, and service life) accounts for 89 percent of the customers' decision.

Eat and Enter are about the same age as Cake and they are similar on positioning. The largest change is in service life. Cake is at 21,000, Eat is at 17,000 and Enter is at 17,500. The service life criteria has a range from 17,000-23,000 and its importance to the customer is 19 percent. Although only accounting for 10 percent of the customers buying decision, the price of Eat and Enter are higher than Cake's price. Cumulatively, service life and price account for 29 percent of the importance to the customer. 29 percent is not an insignificant number.

The top products in the European region will now be discussed. Cake has the largest market share of performance products in Europe.

Eat, Bear, Bucky, and Delta are all very competitive to Cake on the number one key buying criteria (age). Eat has almost the same market share as Cake. Its price is higher (€43.50). Price is only 8 percent of the key buying criteria. Service life is what differentiates Eat (17,000) from Cake (21,000). Bear also has a very competitive position within this segment based upon all customer buying criteria.

The top products in the Asia Pacific region will now be discussed. This segment is small but growing at 49 percent (Table 1b). One would expect that other products would be entering this segment. This is especially true because position and age account for 69 percent of the customers buying criteria (Table 8). New products would be expected to do well in this segment. Because they come in at an age of 0 and they can be positioned by the firm at any point on the perceptual map within this performance segment.

Firm Level Decision Making

Actions which each firm should take are identified on the following tables.

Firm	**Action**
Andrews	1. Increase size: total sales (Table 4) is very low: Focus of expansion should be the primary action
	2. This firm is a target of an acquiring firm: buy back as much stock as possible. Its current market capitalization is $30 million (Table 2)
	3. Pay off emergency loan
	4. Significant inventory in all segments (Table 6b) for a firm its size: Key buying criteria for each segment must be met
	5. Losing money in Americas (Table 7a): Reallocate funds to European and Asia Pacific segments
	6. This product is only selling 3 products in Americas in budget market and 4 products in Asia Pacific markets and 7 units in Europe. These products should be eliminated (Table 9,10,11)
	7. Andrews stand should be in the performance segment
	8. This firm needs to enter Chapter 11 bankruptcy protection

Firm	Action
Baldwin	1. With Baldwin's $53,200 million (Table 3) expansion, it will have the capacity to generate over $200,000 million in sales
	2. If Baldwin decides to continue to expand the size of its plant, it should fund this expansion through the issuance of long-term debt. The primary reason is because Baldwin has 4,147,094 shares of stock (Table 2) outstanding. Any further issuance of stock will not allow EPS to grow
	3. By increasing the size of Baldwin's plant, this action will permit Baldwin to have more price flexibility. A low price will allow Baldwin to increase its attractiveness to customers in the budget segment because price is the number one key buying criteria in this segment in all 3 geographic regions. Price is 55 percent of the buying criteria in the Americas, 50 percent of the buying criteria in Europe and 60 percent of the buying criteria in the Asia Pacific region (Table 8).
	4. The budget segment accounts for 70 percent of the units in the Americas and 24 percent of the units in Europe (Table 1a)
	5. Baldwin has $13,489 (Table 3) in cash which is a good buffer
	6. Currently Baldwin has an automation level of 7.5 (Table 6a). This level should be maintained as long as competitors have lower automation levels (this is the current situation)
	7. Baldwin has significant inventory levels in the Baker product in the Americas and Europe (Table 6b). In addition, Bucky product in Europe also has high inventory levels. Evaluate products to ascertain which key buying criteria are not being met
	8. Baldwin has no position in Asia Pacific performance segment (Table 12)
	9. Baldwin is currently following a cost leadership strategy. Baldwin should continue to follow this strategy

Firm	**Action**
Chester	1. Chester has a significantly large plant ($163 million in sales). Increase size to remain competitive in budget segment and increase automation with $46 million in cash (Table 3)
	2. Chester has an EPS for this round of $3.46. (Table 2) This is do in part to the relatively low (2.9 million) shares of outstanding stock. Continue to buy back stock
	3. Chester has decided not to continue to grow its plant. It has $0 investments in plant improvement for this round of the simulation. (Table 3) Per point 1, this is not recommended
	4. Chester has high inventory levels on the Chris product in all 3 regions of the budget market segment. (Table 6b) Utilize investments to make products focused upon key buying criteria
	5. Chester's Cake product has the number 1 market share in all 3 regions of the performance market segment. (Table 12) Products need to be evaluated to continue to maintain this position via meeting key buying criteria
	6. The performance market segment is oriented toward new products. Age and positioning account for about 70 percent of the key buying criteria in all regions. Focus on new product development in all 3 regions of performance segment
	7. Chester's primary focus is a differentiation strategy
	8. Cake and Chris have moderate positions within the Americas, Europe and Asia Pacific in the budget segment. (Table 9,10,11) As such, automation is somewhat important. Baldwin and Andrews have higher automation levels in this cost sensitive segment (Table 6a)
	9. Digby needs to use its $48,374 in cash to resolve the above issue

Firm	Action
Digby	1. Digby did not generate the level of profits ($1308 million) which other firms did (industry average of $9475 million) (Table 4)
	2. Digby has too many shares of outstanding stock (4.14 million). (Table 2) This is partially causing EPS ($.32) to be low and have an unfavorable negative impact upon stock price (Table 2)
	3. Digby invested $8,000 in plant improvements and funded this expansion with long-term debt. This is a recommended approach for this firm
	4. Digby has too much cash ($48,374) (Table 3), this cash needs to be invested to grow the business and to buy back outstanding shares of stock
	5. Digby is losing money in the Americas region and making profits in Europe and Asia Pacific (Table 7a, 7b, 7c). Digby needs to reevaluate its strategy in the Americas region
	6. Daze is generating too much inventory (398) inventory in Europe (Table 6b)
	7. In the budget segment, Digby is the market leader in Europe (Table 10), it has the 3rd highest market share in the Americas (Table 9) and the 2nd largest market share in the Asia Pacific region (Table 11). Efficiency is important to maintain these levels of market share : automation may be a good use for excessive cash ($48 million) (Table 3)
	8. In the performance segment, Digby has the 2nd lowest market share in Europe, a low market position in Asia Pacific, and the 2nd lowest market share in the Americas. (Table 12) Digby needs to add value to these products to increase market share or make a decision to divest them.

Firm	Action
Erie	1. Erie has the highest profit ($85,165) of all firms in the industry. The average industry profit is ($33,442) (Table 4)
	2. Erie has made good use of its long-term financing by investing more with long-term debt rather than the issuance of stock. (Table 3) Erie should buy some of its stock back. This will increase earnings per share and make it more difficult for another firm to acquire Erie.
	3. Erie has $46 million in cash (Table 3). Buying back stock would be one recommendation for this firm. This is too much cash. Invest to make products more attractive to customers in both segments
	4. Erie has not made any plant improvements in this round. (Table 3) To compete with Baldwin in the budget market segment, Erie needs investments in plant improvements.
	5. Erie generated $20.9 million in profit in the Americas region of the budget segment. This profit was 2 ½ times greater than the closest competitor, Baldwin (Table 7a)
	6. Erie does not have a position in the budget segment in the Europe region.
	7. Erie does not have a position within the Asia Pacific region. Evaluate whether it should (Table 7c)
	8. Erie has an automation level of 3.6 (Table 6a). This must be increased if Erie is going to continue to be a strong competitor within the budget segment
	9. Erie has 2 products in the Americas' region in the budget segment. Eat is generating 381 units in inventory and Enter is generating 391 units in inventory. The reason for these inventory levels need to be identified and modified to meet the key buying criteria of this segment in this region (Table 6b)
	10. Erie is also generating 179 units of inventory in the European region within the budget segment. Ascertain what is causing this and correct
	11. Erie has a very solid position in the performance segment. Erie has the 2nd and 3rd largest market share in the Americas region within the performance segment. (Table 12) How can this market share level be maintained?
	12. Erie has the 2nd largest market share in the Europe region of the performance segment. (Table 12) How can these market share levels be maintained
	13. Erie needs to use some of its $46 million dollars in cash to continue to introduce new products in the Americas and in Europe regions (Table 3)

Firm	Action
Ferris	1. Ferris has cumulative profit of $14.2 million. (Table 4) At the end of this round, the industry average in terms of cumulative profit was $33.4 million (Table 4)
	2. Ferris has a position in all 3 regions: Americas', Europe, and Asia Pacific (Table 9,10,11)
	3. Ferris has a moderate amount of shares of stock outstanding (3,456,000 shares) (Table 2)
	4. Ferris has over $60 million in cash. Some of these funds should be to buy back stock back to increase EPS and market capitalization (currently at $71 million). (Table 2) Buying stock back will increase EPS which will increase stock price. Increasing market capitalization will make it more difficult to acquire Ferris
	5. Ferris has not made any plant investments during this round. It needs to keep growing its plant to remain price competitive in the budget segment
	6. Ferris is generating net profit in all three regions ($2.7 million in the Americas; ($1.1 million in Europe; $618 thousand in Asia Pacific) (Table 7a, 7b, 7c)
	7. Ferris strategy in the Asia Pacific needs to be revisited. Its net profit is about 31 percent as much as the next lowest competitor (Chester) (Table 7c)
	8. Ferris has significant inventory in its Americas region (Table 6b). Its inventory in Europe and Asia Pacific are acceptable. Ferris needs to invest in efficiency measures. It has the cash to do it ($60.8 million) (Table 3)
	9. Ferris has a significant position in the budget segment of all three regions. It has the 2nd and 4th highest market share in the Americas (Table 9); the 2nd and 5th highest market share in Europe (Table 10) and the 1st and 3rd highest market share in Asia Pacific (Table 11). Additional efficiency actions should maintain market shares
	10. Given its market presence in all 3 geographic regions, Ferris needs to invest some of its $60 million in cash to increase automation. It also needs to increase its plant size to achieve greater economics of scale in all 3 regions
	11. Ferris does not have a position within the performance segment. As such, it needs to generate greater efficiencies in the budget segment (Table 12)
	12. Its strategy is cost leadership
	13. Outsourcing should not be used by Ferris (Table 6b). The automation level is 2 and cannot be changed throughout the simulation. Much higher automation is required to achieve cost efficiencies in the budget segment

Table 13 provides an overall summary of decisions which are crucial for the next round.

Table 13
Overall Summary By Firm

Firm	Strategy	Primary Decision
Andrews	Focus Low Cost	The firm will not remain in the industry unless its obtaining Chapter 11 government protection
Baldwin	Cost Leadership	With automation at 7.5 and minimal cash, Baldwin needs product line profitability analysis. Divest unprofitable products. With no position in performance ,Baldwin must dominate budget segment
Chester	Differentiation	Focus upon value as opposed to cost. All products need to be evaluated from a profitability perspective. Invest some of the $48 million in cash in matching key buying criteria to products in the performance segment
Digby	Focus Low Cost	Has $46 million in cash which needs to be invested in automation and increasing plant size
Erie	Differentiation, Cost Leadership	Use part of $46 million in cash to buy stock back. Generate efficiencies in budget segment. A chunk of $46 million needs to go the increasing plant size and automation. Erie has a dominant position in performance segment. Use part of $46 million to align existing products with key buying criteria. Introduce new products in performance segment
Ferris	Cost Leadership	Use $60 million in cash for automation and increasing plant size

We have discussed how the design and implementation of an international strategy can be developed over time. There are very few international textbooks, if any, which go into such depth to explain how to implement an international strategy. Global DNA provides this integrated implementation capability in a risk-free environment.

There is one other crucial point. I am not aware of any strategy textbook, other than the one you are reading, which goes into such depth discussing sales forecasting. Without accurate sales forecasting, your firm will either run out of product or create significant inventory. If you run out of product, sales go to competitors; if you have too much product, you incur significant inventory carrying costs. As stated in the Global DNA Manager's Guide, "*Because your forecasts are used by other departments, they will have profound effects on you company if inaccurate – such as having too much or too little inventory, or not achieving the sales necessary to fund investments.*" Chapter __ of this text explains sales forecasting in some detail. The international simulation discusses it from a scenario perspective.

The simulation uses a worst case scenario and a best case scenario. Actual sales will probably be somewhere in between because of actions taken by competitors and changing market conditions. Scenario analysis is used by fortune 500 firms because they know that sales forecasting will generate sales levels of moderate accuracy. One firm cannot control the action of other firms and the customer base. Another firm, customers and market conditions will control actual sales levels for all firms. Because the firm has little knowledge of this information prior to developing its own sales forecasts, these conditions will impact the firms' sales forecast. With an understanding of Capstone and Global DNA, you can enter the job market from a position of strength.

Discussion Questions

1. Why is the competitive landscape important?
2. What does the financial summary provide us?
3. What does the international analysis provide us?
4. What does the internal analysis provide?
5. What does regional sales and profitability provide us?
6. What are key buying criteria?
7. What is firm decision making?

Chapter 13

Strategic Leadership Decision Making

Learning and Assessment Goals

1. Determine how strategic leaders make decisions which meet the needs of the firm's various stakeholders.

2. Determine how strategic leaders make decisions at both corporate and business levels.

3. Determine how strategic leaders make decisions over time within multiple industries.

4. Understand how strategic leaders evaluate competition.

5. Understand what strategic leadership decisions need to be made in difference stages of an industry's life cycle.

6. Determine why some strategic leaders have made or not made ethical decisions

"Apple has lost a visionary and creative genius, and the world has lost an amazing human being. Those of us who have been fortunate enough to know and work with Steve have lost a dear friend and an inspiring mentor. Steve leaves behind a company that only he could have built, and his spirit will forever be the foundation of Apple".(Apple News Release 2011)

Strategy has been defined as the ability to gain and sustain competitive advantage[1]. In essence, firms must be able to identify trends within the environment and develop resources and capabilities to capitalize on these trends to increase shareholder wealth. Leadership has been defined as the process of transforming organizations from what they are to what the leader would have them become[2]. Therefore, strategic leadership is the ability to transform organizations to meet the needs of various stakeholders over time.

Strategic Leadership

Strategic leadership encompasses a number of attributes: developing human capital, exploiting and maintaining core competencies, sustaining an effective organizational culture, emphasizing ethical practices, and establishing balanced organizational controls[3]. Each of these elements will be briefly discussed. Developing human capital is, by far, the most important.

In the long run, the growth of any firm is based upon the quality of human capital[4]. Human capital may be the source of competitive advantage now and in the future because it is non-substitutable. In addition, human capital drives the development of all other attributes listed above. Therefore, human capital allows the firm to gain competitive advantage[5]. The development of human capital at all levels of management allows the firm to sustain competitive advantage. Fred Smith, founder of Fed Ex, believes that people are more important than products or services. He believes that if you hire, train, and retain good people they provide superior service. By providing superior service, the firm will be able to sustain continued profitability. Exploiting and maintaining core capabilities is a second attribute which is crucial for strategic leadership to be effective.

Core competencies are the resources and capabilities that give a firm a competitive advantage over its rivals. In the 21st century, an ability to develop and exploit core competencies will be linked even more positively and significantly with the firm's success. Only the combinations of a firm's resources and capabilities that are valuable, rare, costly to imitate, and for which there are no equivalent strategic substitutes can be rightly identified as core competencies.[6] The relatively unstable market conditions resulting from innovations, diversity of competitors, and array of revolutionary technological changes occurring in the new competitive landscape have caused core competencies rather than served markets to become "the basis upon which firms establish their long-term strategies."[7]

As firms continue to globalize, developing core competencies becomes even more important. Once a firm has achieved advantage within its domestic markets, it can enter international markets from a position of strength.[8]A firm that can build competencies to profitably develop domestic markets and exploit international markets will have multiple sources of advantage over competitors which may be unable to achieve this expansion.

An excellent way of obtaining and sustaining an effective organizational culture is to provide incentives (stock and/or money) based upon the financial success of the firm on a year-to-year basis. This simple principle has led UPS to be one of the largest firms in the world. Caterpillar and Archer Daniels Midland (ADM) are also examples of firms which reward senior managers based upon the profitability of the firm. Both of these firms have been experiencing record growth and profit.

Providing an environment that supports ethical practices is another aspect of effective strategic leadership.[9] Strategic leader's commitment to serve stakeholders' claims will contribute to the establishment and continuation of an ethical organizational culture. This condition applies both to domestic and international markets which a firm services. This is one reason the Sarbanes-Oxley Act (SOX) of 2002 was created. This act was implemented in 2002 with the effects coming into play in 2003 and 2004. The Sarbanes-Oxley Act, "Introduced a new era of corporate governance, including requirements for auditor independence, the restriction of firms engaging in accounting from both auditing and consulting services, independence of firms board committees, management assessment of internal controls and personal certification of financial reports by CEO's and CFO's.[10] These are important reasons why establishing and maintaining ethical practices are important. Unethical practices take away both managerial time and resources which should have been allocated to running a successful firm to maximize shareholder wealth. Because firms are global in nature, establishing balanced organizational controls is a crucial aspect of effective strategic leadership.[11]

Defined as the "formal, information-based…procedures used by managers to maintain or alter patterns in organizational activities," controls help strategic leaders build credibility, demonstrate the value of strategies to the firm's stakeholders, and promote and support strategic change.[12] Controls provide the parameters within which strategies are to be implemented, as well as corrective actions to be taken.[13]

Strategic leadership's impact upon both corporate and business level strategy will now be discussed. The chief executive officer (CEO) and the senior management team normally have strategic leadership responsibilities within firms. The stakeholders of strategic leaders are illustrated in Figure 13.1.

Ethics

Business ethics involves the application of general accepted principles to the actions and decisions of businesses and the conduct of their personnel.

The effectiveness of processes used to implement the firm's strategies increases when they are based on ethical practices. One reason is because ethical companies encourage and enable people at all organizational levels to follow a firm's best practices and procedures while implementing a firm's strategies.

Companies that are viewed as highly ethical may improve their business reputations and operational efficiency while also reducing their risk exposure and encouraging loyalty and firm innovation. (e.g. Apple)

Unethical practices can add costs or harm a firm's reputation. Ramifications of unethical practices are (1) governmental placing restrictions on company behavior, (2) loss of key employees, (3) costs associated with following detailed and expensive government controls, (4) reduction in shareholder value, (5) reduction in firm's brand value, (6) higher employee turnover leading to an increase in recruiting and training costs, and (7) difficulty in attracting talented employees.

Virtually all of these actions impact a firm's short run and long term value. By not being able to attract or keep talented employees, these employees will obtain jobs elsewhere. Many go to work for competitors. In addition, competitors may not incur costs of recruiting and training because some of these employees have already been trained by the unethical firm.

The same is true of shareholders. If firms are not increasing shareholder wealth, shareholders will invest their funds into other firms which can provide them with greater shareholder wealth. Some of these firms may be your competitors.

Most Ethical Firms

A common trait of firms which are very ethical is they are good corporate citizens. Google has donated over $1 billion for use in creating renewable energy. Microsoft donates over $1 billion per year to charity foundations. Patagonia, a California based clothing firm, donates 1% of its sales to environmental sustainability. Starbucks is another firm which spends significant amounts of funds for environment sustainability.

Intel hosts many events to help promote education and the development of young people. Salesforce.com donates millions of dollars per year to education.

Another trait of ethical firms is their focus upon their employees. SAS Institute is a North Carolina based developer of analytics software. It owns the largest market share of advanced analytics and is one of the world's largest private software companies. Their employees have 100 percent subsidized health care.

NuStar Energy, a pipeline firm for the movement of oil, pays 100% of its works health insurance premiums and has a no layoff policy.

Ultimate Software, a leading cloud provider of People Management Solutions, provides its employees and their dependents with 100% free health care. This firm also focuses upon diversity: 46% of its employees are women and 33% of its employees are minorities. Employees of Starbucks also have full health care insurance benefits for all of its employees.

A summary conclusion would be that unethical firms must engage in questionable ethical conduct to stay in business. On the other hand, ethical firms are very profitable and provide their employees with benefits that are not offered by unethical firms. In addition, environmental sustainability is a key element which ethical firms invest significant amounts of money into. As such, a firm's ethics can impact its bottom line by retaining valuable employees and customers.

Least Ethical Firms

Unethical behavior can take many forms. One form involves customer safety. Ryanair, a discount E.U. airline, takes aggressive cost cutting measures with safety issues which could result in flights crashing and hundreds of passengers losing their lives. Ryanair could respond by raising prices. However, raising prices without adding value is not a sound strategy in an elastic market. Ryanair views its only approach to profitability is to cut costs. This could be true, but low cost airlines such as Southwest and Jet Blue have been very successful and profitable in the airline industry without raising prices above industry norms.

A second type of unethical behavior is focused upon human rights. Total SA, a French oil and gas firm, has been accused of building pipelines with slave labor. Grupo Mexico SA is a copper mining firm which is in a two-year labor strike. Miners are striking because of numerous safety and health violations which could lead to miner deaths.

Freeport – McMoRan Inc. is a copper and gold mining firm in Indonesia. This firm is accused of stealing gold and copper which has been extracted by local firms. A better and more ethical option would be to develop strategic alliances with these firms.

In addition, Monsanto has been accused of frequently and unfairly suing small farmers for patent infringements. Strategic alliances are also an option under these types of conditions.

A third type of unethical behavior concerns how firms deal with governments. Phillip Morris has been accused of attempting to bribe the U.S. government to abandon its ten-year lawsuit against tobacco manufacturers. This type of action is not only unethical, it is also illegal. Halliburton has been accused of unfairly attempting to procure billions of dollars of U.S. government contracts. Chevron has been accused of tax evasion and environmental infraction in several international markets. Syngenta AG, an agricultural and chemical firm, has been accused by several governments of using pesticides which are harmful to the environment and to humans.

Customers would prefer to work with ethical rather than unethical firms. A crucial downside of unethical behavior is that shareholders and employees, may go to other firms.

Ethics Scenario

Sam Smith is the National Accounts Manager of the high end product line for firm Baldwin. Sam is responsible for firms who buy more than a specified amount per year of the high end product. This specific national account firm currently has a 50% share of the high end market. No other customer buys more than 10% of the high end product. There are five other competitors in this segment.

The National Account Manager for a competitor to Baldwin has acquired a technology which will allow high end products to be R&D'ed in 40% less time. The technology will allow products to be produced by total automation.

The National Account Manager wants you to start up a company using the new technology. He is currently attempting to obtain a patent. He states that if you are not interested he will contact someone else.

Since the technology already exists, the time from R&D to final product completion will be the shortest in the industry. You tell the customer that you will get back to him by the end of the week. The following is an overview of the high end product line.

High End Statistics

Total Industry Unit Demand	4,656
Actual Industry Unit Sales	4,656
Segment % of Total Industry	12.60%
Next Year's Segment Growth Rate	16.20%

High End Customer Buying Criteria

Importance	*Expectations*	
1. Ideal Position	Pfmn 12.5 Size 7.5	43%
2. Age	Ideal Age = 0.0	29%
3. Reliability	MTBF 20000-25000	19%
4. Price	$28.00 – 38.00	9%

After Sam leaves the National Accounts Manager's office, he looks at the segment from a quantitative issue. From the data, he knows that the high end segment is 12.6% of the industry demand. The growth rate is 16.2%.

With the R&D cycle time is being reduced by 40%, a new product could be introduced with an age of zero in a much shorter time period. 72% of the customer buying criteria are positioning and age.

With the technology providing for a totally automated product, the new firm would have a cost advantage and cycle time advantage over all other firms (including his own) in the industry. What should Sam do?

Since Sam does not have a contract with his current firm, he could leave at any time. However, if he had not been the National Accounts Manager for Baldwin, his current employer, the opportunity would not have become available.

Because Sam is the National Accounts Manager, he knows all of the competitors and all of the large high end customers. The National Accounts Manager offering the new technology does not know the customer base. This is very important to the individual who has the technology. He would not know who to contact. A new firm could have a competitive advantage with this technology.

All functional areas (e.g. finance, R&D, marketing) would have to be developed and staffed. What should Sam do?

From an ethical perspective, Sam should tell his boss exactly what has happened and that Sam would not have access to the technology until he decided to resign and go to work for the new firm. Total honesty could be very helpful if this venture does not work and he tried to obtain his job back at Baldwin. If he really wants to stay at Baldwin, he should see if the new firm would be interested in a strategic alliance.

Since Baldwin is an existing firm, a new firm would not need to be created in addition. Baldwin may have access to funds to more quickly implement the technology.

Sam's reputation will be determined by the decisions which he makes. He must take action. This must be ethical action if he is concerned about his reputation in his firm and in the industry.

Figure 13.1
The Stakeholders for Strategic Leaders

Customers

One group of stakeholders that must be addressed is the customers. Without customers, the firm has no revenue. In order to meet the needs of customers, strategic leaders must identify key success factors within each industry. Key success factors are the set of conditions that customers deem as important, and upon which customers make buying decisions[14]. The simulation identifies these conditions as key buying criteria. Firms that meet key buying criteria better than competitors may achieve competitive advantage.

The simulation addresses four key buying criteria. For each segment, the key buying criteria are (1) positioning, (2) price, (3) age, and (4) performance (mean time before failure). These key buying criteria are weighted differently for each segment. Table 13.1 identifies the set of key buying criteria within the low end and high-end segments of the simulation.

Table 13.1 Key Buying Criteria			
High-End Segment		**Low-End Segment**	
Criteria	% of Buying Decision	Criteria	% of Buying Decision
Positioning	43	Price	53
Age: 0 Years	29	Age: 7 Years	24
MTBF: 20,000-25,000	19	Positioning	16
Price	9	MTBF: 12,000-17,000	7

Within the high-end segment, the most important key buying criteria is positioning. Positioning is best met utilizing new product R&D. Within the high-end segment, customers want new products (age = 0) that are durable (MTBF mean time before failure = 20,000-25,000). To meet these key-buying criteria, firms must continuously engage in new product R&D. As products age, the firm may sell some existing products in other segments.

From Table 13.1, the low-end segment's key buying criteria is dominated by price. As products age, the products that were sold within the high-end segment may meet customer needs in the traditional, and eventually, in the low-end segment. The funds generated from sales of these products may be re-invested within the firm to R&D new products for the high-end segment. In this manner, firms can meet the needs of additional market segments over time. By understanding how these criteria evolve over time, the firm may be able to obtain a superior position with respect to competition. Employees are the second group of stakeholders that strategic leaders must satisfy.

Employees

Employees have access to information concerning how well current products meet the needs of customers. Sales employees obtain feedback from customers about the firm and competitors' products. Senior management uses this information to make revisions on existing products or develop new products. In addition, sales employees can provide senior management with information concerning how key buying criteria evolve over time. By identifying how these criteria change, senior management can allocate resources, normally funds for product R&D, to meet the changing needs of customers as they arise.

Managerial resources are a key group of stakeholders. Managerial resources create value by using resources to create new productive services that the firm can employ to generate growth faster than competitors[15]. Managerial resources are responsible for developing, implementing, and measuring a firm's strategy. Managers dictate how resources will be allocated within the firm. Without sound decisions by the management team, sustained competitive advantage is not likely. Not only are managerial resources responsible for making strategy decisions, they have the responsibility of implementing them. This is why it is crucial that all employees have input into the development of a firm's strategy. If open communication exists between all employees and senior management, strategy adjustments become easier to implement. If employees have some degree of ownership, it will also make the implementation of the strategy easier. The implemented strategy, not the designed strategy, is what determines competitive advantage.

Because of these responsibilities, strategic leaders must accomplish two primary objectives: (1) maximize quarterly firm performance and (2) maximize long-run shareholder value. The second objective must be the result of a well thought out and properly implemented strategic plan.

Because strategic leadership involves transforming organizations, significant expenses may need to be incurred. Some of the expenses are related to product and/or process R&D, implementation of TQM initiatives, investments in promotion and infrastructure, and development of domestic and global markets. As John Skelly, former CEO of Apple, stated: “The best way to compete in the future is to create it”.

Managerial resources create growth potential for the firm. As multi-national firms expand, the importance of understanding and competing in international markets becomes important. One reason why Paul Mullehom, former president of Archer, Daniels, Midland, obtained his job was because of his international experience. Knowledge of international markets allows firms to re-deploy resources to obtain maximum returns. As discussed in Chapter 10, International Strategies, international markets represent significant growth potential. In addition, the development of international markets may reduce spending needed on new product R&D. The firm may not need to be continuously focused on innovations in domestic markets. International markets allow for expansion of existing or adapted products. International expansion allows firms to grow within the firm’s core business. If the management team does not have international experience, the firm may soon be reacting to international competitors as opposed to leading change. The U.S. auto industry is an example of firms that have engaged in a reactive strategy. Effective strategic leadership identifies not only where the firm needs to grow but also how and when this growth can occur.

Collective Bargaining Organizations

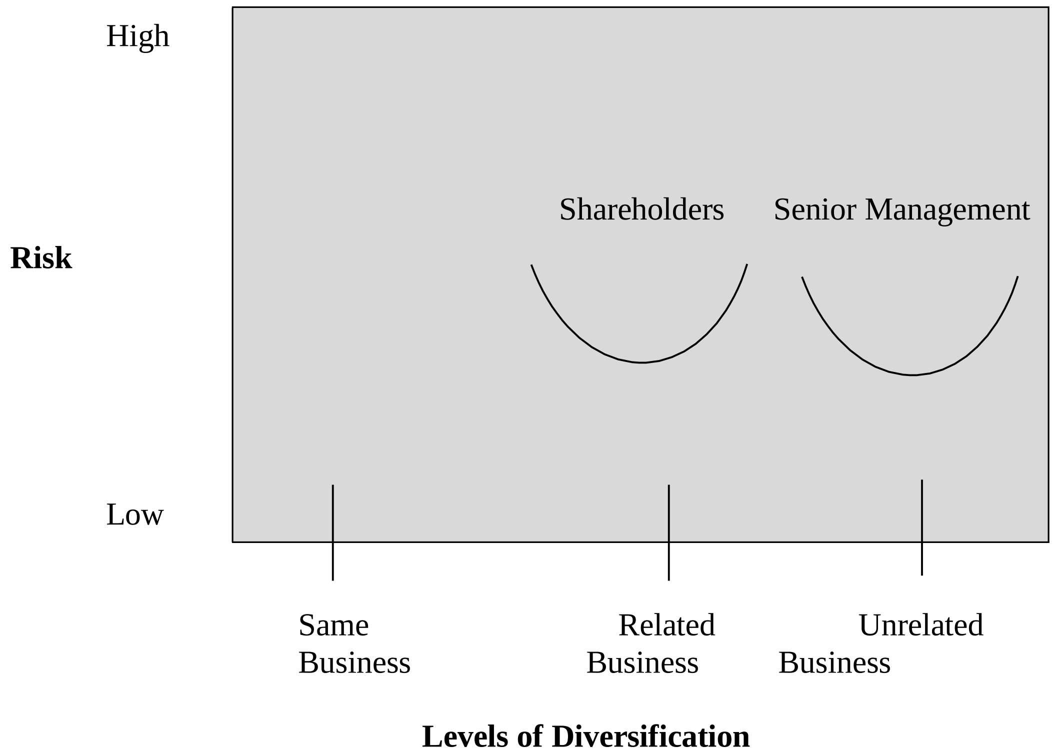
If employees are members of collective bargaining organizations, these organizations may moderate what actions a firm can take. Labor unions may reduce a firm’s flexibility.

Firms with strong collective bargaining units may have less flexibility to participate in outsourcing programs. Faced with rapid global expansion, leaders of the world’s top unions are forming cross-border alliances to share strategies for contract negotiations and to develop international safety and workers-rights standards[16]. These moves could make collective bargaining stronger. This focus on global labor unions comes at a time when union membership, as a percentage of the total work force, has been declining in the U.S., most of Western Europe, and Australia.

Shareholders

Leadership decisions can lead to “destruction” for shareholders. One only needs to pick up the paper. Corruption and greed have occurred with alarming regularity among CEOs entrusted with strategic leadership responsibilities. Enron, WorldCom, Arthur Andersen, Tyco, and AIG all had CEOs who attempted to utilize their leadership positions for personal gain at the expense of shareholders. One of the reasons why these CEOs engaged in opportunistic behavior is because of risk. One type of risk that has different consequences for shareholders and CEOs (including senior management) concerns acquisitions. Figure 13.2 illustrates these different risk profiles.

Figure 13.2
Shareholder & CEO Risk Profile



Source: Adopted with the permission of Thompson Learning from *Strategic management* by M. Hitt, R. Ireland, and R. Hoskisson. 312.2005.

Shareholder risk is minimized with more related acquisitions. Shareholders can diversify their risk by creating a portfolio of stocks with different risk profiles. The CEO and senior management cannot. Therefore, they may be more focused on engaging in unrelated acquisitions to reduce employment risk. Unrelated acquisitions may result in a portfolio of different businesses that may lead to more stable cash flows. This stability of cash flows tends to reduce CEO and senior management risk. However, firms that acquire related businesses tend to generate higher returns than unrelated acquisitions. As discussed before, to solve the risk difference between shareholders and senior management, firms are beginning to compensate senior managers based on the financial performance of the firm. Executive compensation is the responsibility of the board of directors. Boards of directors are an important stakeholder group because they represent the interest of shareholders.

Board of Directors

The board of directors has two primary responsibilities: (1) maximize shareholder value and (2) hire and fire the CEO. Boards of directors have become more involved in developing a firm's strategy. Historically, boards of directors have utilized the CEO as the primary information source with respect to firm actions and reactions[17]. More recently, boards of directors have become more proactive in terms of utilizing multiple sources for information and becoming more active in firm decision-making[18].

The Sarbanes-Oxley Corporate Reform Law of 2002 requires CEOs and chief financial officers (CFOs) to sign their financial reports certifying the reports' accuracy. The CEO and CFO are threatened with criminal prosecution if they knowingly certify false documents. This act is another way of reducing the risk difference that may exist between senior management and shareholders. Because most firms cannot fund growth entirely through internal funds, the investment community becomes important.

Investment Community

Firms need to have good relationships with investment bankers. Investment bankers provide capital to fund a firm's expansion. Whether a firm is expanding via acquisition, development of international markets, or other major expansion programs, firms are not normally able to fund significant expansion programs entirely from cash from ongoing operations.

For the firm to grow and create additional value for shareholders, the firm needs to develop long-term relationships with the investment community. In addition, the investment community attempts to provide an independent objective view of a firm's future performance. Wall Street's "point of view" may positively or negatively impact a firm's stock price. Strategic leadership has implications for both corporate and business level strategy. The relationship between strategic leadership and growth will be discussed.

Table 13.2
Senior Managers and Ethics

Shareholder	Ethical	Unethical
Shareholders	Investment maximized	Increase to shareholder wealth not obtained
Employees	Investment in profit sharing not maximized	Higher turnover
Board of directors	Maximizing shareholder wealth	Senior managers maximizing their own wealth
Collective bargaining organizations	Capability to work together with collective bargaining organizations	Minimal interest in bargaining to provide for firm growth and/or profitable returns
Investment community	Long term relationships with investors maintained	Hesitant to provide funding needed for growth due to prior negative relationships
Customers	Meeting evolutionary needs of customers	Time devoted to unethical behavior: needs of customers may not be met

Senior Managers and Ethical Decision Making

Senior managers have many stakeholders which must be satisfied. Table 13.2 provides a discussion of senior managers and ethics. Shareholders will be discussed first.

A primary role of senior managers is to provide for increasing shareholder wealth. Ethical decision makers will work to make decisions which will maximize the returns to shareholders. They will not engage in risky decision making which could reduce shareholder wealth. From a diversification perspective, senior managers will most likely engage in related diversification because, in general, these types of actions will increase shareholder wealth (Figure 7.1: Chapter 7). In addition, unethical decision makers will normally decrease shareholder wealth.

Unethical decision makers can have a negative impact upon employees. Employees model behavior of their superiors. If employees are aware of unethical senior manager actions, employees may take the position that unethical decision making is fine and act accordingly (in this case, unethically). If employees are ethical, they may change jobs to more ethical firms who have ethical senior managers. In this case, the unethical firms will need to incur significant time and money to hire and educate new employees. The employees who have moved to ethical firms take institutional knowledge about their former firm, its position in the industry, and knowledge of the industry and customer base they have acquired during their employment with the unethical firm.

If senior managers are unethical, boards of directors must fire them. In addition, boards of directors must then conduct a search to replace them. In the meantime, the unethical firm may lose some of its market positions because no one in the unethical firm can make superior decisions in the firm's best interest. As a result, shareholder wealth may decline.

With declines in shareholder wealth, firms may have difficulty obtaining needed funds from investment banks which are needed for growth. In fact, investment banks may be more inclined to provide funds to competitors because the value of shareholder wealth with unethical decision makers has declined and will continue to decline.

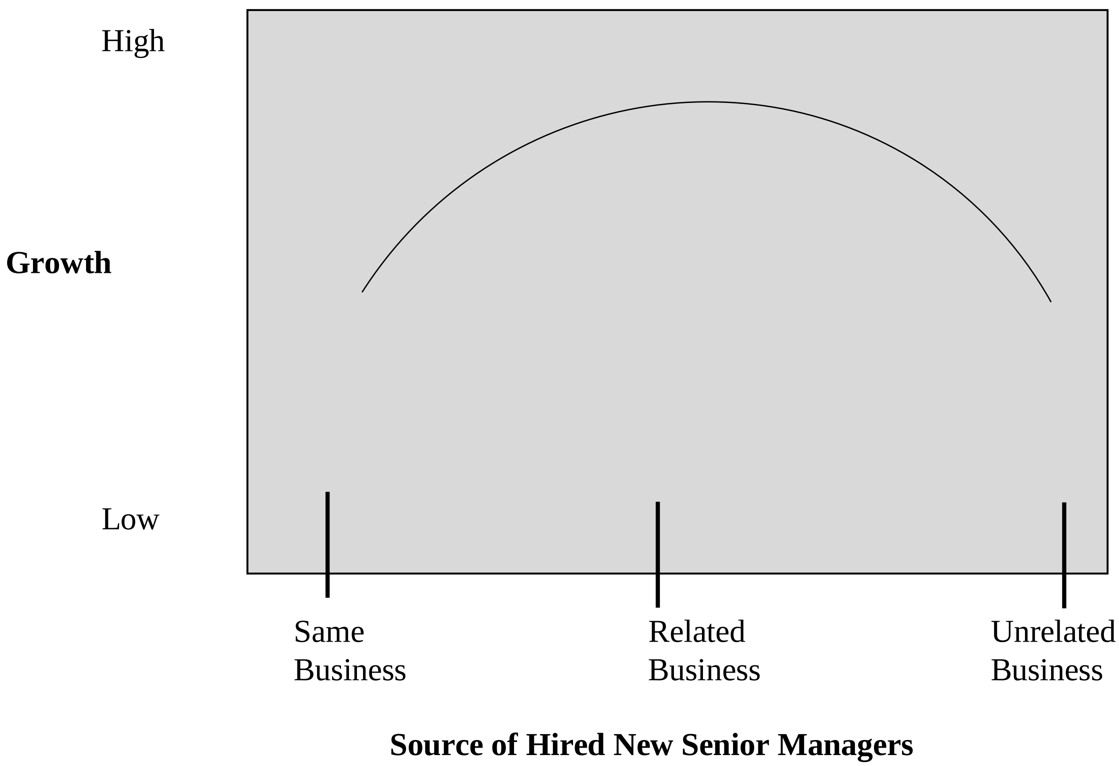
In order to meet the needs of customers, the needs of collective bargaining organizations must be met. If firms do not deal ethically with collective bargaining units, firms may be forced to deal with labor strikes. Trust is of crucial importance when dealing with labor unions. Strikes do not allow firms to meet the needs of the marketplace (e.g. customers). If a firm goes on strike, competitors may benefit from obtaining customer revenues from customer bases of the unethical firm. In addition, if the competitor has good relationships with its collective bargaining unit, it knows that product supply will be met when needed. In addition, once customers move to competitors of the unethical firm, there is no guarantee that the customers will return to the initial firm once the strike is over. This takes revenue from the firm that is engaged in the strike and this revenue immediately goes to competitors. This diversion of revenue could affect the domestic and international customer base of the firm that is engaged in the strike.

One overarching theme that can be stated is that unethical senior managers are limited from a conceptual perspective. Visionary senior managers do not need to be unethical because they create industries: Steve Jobs (Apple), Bill Gates (Microsoft), Jim Casey (UPS), Fred Smith (FedEx), Ray Kroc (McDonald's) and Larry Ellison (Oracle). The above list is not all inclusive but shows that industries can be created by ethical, visionary, senior managers. I am not aware of any industries which have been created by unethical decision makers. Visionary leaders are too busy developing new industries; they do not have the time or the interest of engaging in unethical behavior.

Strategic Leadership and Growth

In the long run, the competitiveness and growth of any firm is directly related to decisions made by the senior management team. Managerial resources which have different capabilities may provide the firm with different performance consequences. Figure 13.3 implies that the accumulation of managers from related industries will generate higher growth than hiring managers from the same or unrelated industries.

Figure 13.3
Hiring of Senior Managers and Performance Consequences



This relationship is similar to the relationship which we discussed in Chapter 7, Corporate Level Strategy and Restructuring.

Firms which hire managers from the same industry may not have the performance potential as opposed to firms which hire managers from related industries. Firms which have hired managers from the same industry limit growth because they have the same experience as existing managers. Many of the U.S.'s airline acquisitions have not been profitable because the target's managerial resources do not, in most cases, have experience outside the U.S. commercial airline industry.

Table 13.3 shows the major U.S. airline acquisitions since 2001.

Table 13.3
U.S. Airline Acquisitions Since 2001

Combined Airline	Acquisition Date	Acquiring Firm
American Airlines/TWA	4/9/2001	American Airlines
US Airways/America West Airlines	9/27/2005	US Airways
Delta Airlines/Northwest Airlines	12/31/2009	Delta Airlines
United Airlines/Continental Airlines	10/1/2010	United Airlines
Southwest Airlines/AirTran Airways	5/2/2011	Southwest Airlines
American Airlines/U.S. West Airways	2/14/2013	American Airlines

As shown in the table, the major U.S. airlines have had a tendency to acquire another airlines. These types of acquisitions limit the growth potential of the acquiring firm because the acquiring firms are obtaining managerial resources from other U.S. airlines who have similar knowledge.

American Airlines has lost $4.22 billion since 2008. U.S. Airways/America West Airlines has lost $2.95 billion since 2007. Delta Airlines lost $1.24 billion in 2009. It is too early to have financial results from the United Airlines/Continental Airlines merger or the 2011 of Airtran Airways by Southwest Airlines.

This data points to the fact that top managers who have spent their careers in one industry or firm, they will have a limited knowledge base from which to conduct a strategic search for new opportunities and would not be likely to pursue new ideas outside this limited knowledge base.[19]

A firm's managerial resources are of crucial importance in times of change.[20] Top management teams must possess experience outside the firm's core business during periods of significant change. Under conditions of environmental change, firms must pursue senior managers with new capabilities.[21] Those senior managers provide skills that are particularly scarce relative to their competitors, and being relevant in the particular competitive context, have the potential to generate rents.[22] This is especially true because these skills cannot be imitated quickly by other top executives in other firms.

Senior managers from unrelated industries have different perceptions of the environment, the customer base, the nature of competition, and differential speeds of learning. In addition, managers from unrelated industries may not have knowledge of strategic industry factors of the industry they are entering. Strategic industry factors dictate buying decisions. In the industry in which they are moving to, managerial resources drive the development of firm specific capabilities which in turn will determine what productive services the firm is capable of offering. Without knowledge of strategic industry factors managers may not make good business decisions.

One of the primary assumptions of the theory of the growth of the firm is that "history matters."[23] Growth is essentially an evolutionary process and based on the accumulation of collective knowledge.[24] Penrose (1959) states that, "the growing experience of management, its knowledge of other resources of the firm and of the potential for using them in different ways, create incentives for further expansion as the firm searches for ways of using the services of its resources more profitably. This is especially true in industries with turbulent environments.

The air freight and airline industries were deregulated in 1978 while the trucking and railroad industries were deregulation in 1980. Many firms did not survive the consolidation of these industries. The transportation firms which are successful today are multi-modal carriers. These firms have become total transportation firms which provide all modes of transportation worldwide. These firms offer trucking, rail, air freight, ocean shipping, and logistical services worldwide.

Managers with superior knowledge of a firm's capabilities and industry context are more likely to design strategies that create value by being more effective than rivals at bundling and deploying resources in new ways.

This perspective of the firm as being able to dictate environmental change extends the traditional position of the firm from responding to environmental change after the fact. By the management team acquiring new capabilities, the firm has the potential to create environmental change that alters the competitive environment in the firm's favor to provide for long-term growth.

As such, through the integration of related industry managerial resources with the firm's existing management team, the firm may be able to "creatively construct" its environment to the point where the firm can dictate the path of environmental change. Firms which have not incorporated new managerial resources from related industries may not have the capacity to grow through "creative construction."

Scandals and Strategic Leadership

Throughout the first part of the new century, corporate scandals have played a central role within many U.S. corporations. The WorldCom scandal resulted in negative consequences for the firm's board of directors. Eleven of the former board members agreed to pay $20.2 million to settle a lawsuit concerning the firm's accounting fraud[25]. In March 2005, Bernard Ebbers, former WorldCom CEO, was convicted of fraud and conspiracy and sentenced to 25 years in prison. Many other senior executives face situations similar to that confronting Bernard Ebbers[26]. Others who have been convicted are Kenneth Lay (former chairman of Enron), and Jeffery Skilling (former CEO of Enron). Kenneth Lay has died and Jeffery Skilling is serving 25 to life. The senior management team at AIG Inc., the world's largest insurance firm, admitted to a broad range of accounting frauds that reduced the firm's net worth by $1.7 billion[27]. In addition, Michael Eisner (Disney) stepped down as CEO after considerable pressure from the board of directors. Carly Fiorina, former CEO of Hewlett Packard, resigned as a result of the Compaq acquisition.

In many cases, individuals attempted to maximize their own personal financial gains instead of trying to increase shareholder wealth. What is alarming is that CEO bonuses rose 46 percent at 100 of the largest U.S. companies in 2004[28]. Many of these firms did not experience similar increases in shareholder wealth[29].

Due to the fact that many individuals conspired together (e.g. WorldCom senior management), the amount of time to engage in these illegal actions was considerable. This time reduced the focus and commitment the senior management teams needed to devote to maximizing shareholder wealth. Strategic leadership should be focused on gaining and sustaining competitive advantage for shareholders. Strategic leadership is not eliminating or significantly reducing shareholder wealth. Acts of fraud are focused within the firm. Strategic leadership needs to be focused on making decisions based on external factors such as customers, competition, and industry transformation.

Industry Evolution and Strategic Leadership

In Chapter 2, Industry Analysis, the relationship between industry analysis and industry evolution was discussed. A similar framework can be utilized to address what strategic decisions need to be made at different points of industry evolution. The framework is illustrated in Table 13.4.

Table 13.4
Strategic Leadership Decisions
Across the Industry Life Cycle

Stage of Industry Life Cycle	Strategic Leadership Decisions
Introduction	(1) relationship building, raising capital (2) establish suppliers (3) recruit, hire, and train employees (4) build inbound and outbound distribution infrastructure (5) develop communication infrastructure
Growth	(1) develop pricing strategy (2) conduct competitive analysis (3) develop lower cost or differentiation positioning (4) continue relationship building (5) design expansion strategy (including international)
Maturity	(1) achieve economies of scale and economies of scope (2) implement automation (3) implement total quality management (TQM) initiatives (4) implement international strategy
Decline	(1) conduct product line profitability and eliminate unprofitable lines (2) focus resources on more attractive industries (3) decision-making should be focused on the development of innovations to begin the second life cycle process

Introduction

Strategic leaders must obtain capital to fund the new business. Venture capitalists provide funding, but expect high returns. Because the risk is substantial, the venture capitalists must be convinced that the venture is solid. One of the best ways of attracting investors is to have a well-developed business plan. One way of accomplishing this is to hire individuals who have been successful at starting new businesses.

Strategic leadership during the introduction stage of an industry's life cycle is focused on relationship building. The leader must develop relationships with suppliers because none may exist. A network needs to be established that allows for raw materials to be transported to manufacturing/operating facilities and then to customers in a timely manner.

Leaders must hire employees to manufacture raw materials into finished goods. Leaders must instill in employees a sense of pride and commitment. One of the best ways of doing this is to make your employees shareholders. When their compensation is partially rewarded based on the profitability of the firm, employees will be more highly motivated to perform at peak efficiency. A commitment to the firm from sales people during this stage is crucial because the firm is offering new goods/services to new customers. The firm's existence is dependent upon the sales force converting prospects into customers. Compensation programs that provide high incentives to generate sales quickly are crucial at this point.

Since the firm is offering new products/services to new customers, customer acceptance is crucial. The leader must make certain that feedback with respect to products/services, competition, and changing key buying criteria reaches senior level management in a timely manner. A communication infrastructure must be developed to permit timely information to flow throughout the firm and especially to customers. This infrastructure needs to facilitate the building of long-term relationships with employees and customers.

Growth

When competitors have entered the industry, the growth stage of the life cycle has begun. A well-developed pricing strategy is crucial as the firm enters the growth stage. Low prices by the incumbent firm may act as a barrier to entry. Potential entrants may choose to enter other industries that offer more favorable margins.

When competition does enter the industry, strategic leaders can follow one of two approaches. First, as competitors enter the industry with similar products/services, the initial firm may reduce price. Because competitors have start-up costs to recover, price reductions will make this recovery process longer. Second, the initial firm's leaders may decide to improve the quality of existing products by adding value-based features. The attempt with the second option is to create differentiation from competitors. If margins are sufficient, strategic leaders may engage in both approaches. By creating differentiation from competition and offering consumers lower prices, the firm can maximize growth.

It is the leaders' responsibility to anticipate actions by competitors, and quickly implement strategic responses to competitors' actions. Leaders must be aware of the strengths and weaknesses of their firm and of competitors. Strategic leaders will design and implement programs to capitalize upon competitors' weaknesses. Strategic leaders will also implement an expansion strategy to penetrate international markets.

Maturity

When price becomes more of an elastic variable, the industry has entered the maturity stage of the life cycle. Strategic leaders need to design and implement programs that allow for economies of scale to be obtained. As the industry moves further into the maturity stage, price becomes an important key buying criterion. In addition to actions that achieve scale economies, strategic leaders need to design and implement total quality management (TQM) initiatives that reduce costs.

While a firm's domestic market may be mature, the firm may be able to obtain higher margins in international markets within the same industry. International markets may be at earlier stages of the industry life cycle than the firm's domestic market. As such, firms may enjoy the benefits of the growth stage of industry evolution in some international markets. This expansion may permit strategic leaders to obtain additional funds to expand into other international markets.

Decline

As firms begin to exit the industry and/or go out of business, the industry has reached the decline stage. This stage is characterized by decreasing sales and margins. Product line profitability studies need to be continually reviewed. Unprofitable lines need to be eliminated. Strategic leaders need to determine the best allocation of resources. Leaders may reallocate resources to developing international markets that are at earlier stages of the life cycle. This process of industry and international expansion is what sustains firms in the long run. Strategic leaders may allocate resources to create new industries; this begins a new industry life cycle. The entire process will then follow a new life cycle.

Discussion Questions

1. Define strategic leadership.

2. Identify the primary stakeholders of strategic leaders.

3. Why have some strategic leaders engaged in greed and corruption?

4. Explain how strategic leaders analyze competition.

5. What should strategic leaders do when their firm enters the maturity stage of the industry's life cycle? Why?

6. Explain what decisions strategic leaders need to make at each stage of the industry life cycle.

7. Explain why strategic leaders need to develop long-term relationships.

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Hershey Mini Case

The Hershey Company is the largest producer of quality chocolate in North America and a global leader in chocolate and sugar confectionery. This firm has continued to grow from a sales and profit perspective in light of the fact that many of its products are not viewed positively by health conscious consumers.

Table 1 Hershey Financial Data			
Year	2012	2013	2014
Revenue ($ billions)	6.64	7.14	7.42
Net Income ($ billions)	.66	.82	.84
Earnings Per Share	3.01	3.76	3.91
Free Cash Flow ($ billions)	.10	.09	.87

The Hershey Company is a global confectionery leader known for bringing goodness to the world through its chocolate, sweets, mints and other great-tasting snacks. Hershey has approximately 13,000 employees around the world.

The company, which has more than 80 brands worldwide that drive over $7.4 billion in annual revenues, includes brand names such as Hershey's, Reese's, Hershey's Kisses, Jolly Rancher and Ice Breakers.

Hershey has substantial international operations (in addition to the U.S.) in Canada, Mexico, Brazil, Asia, the Middle East, and Africa. Some of these international markets are a source of growth because many of these countries are currently not focused upon the concerns of healthy chocolate products. While some products, may need minimal adaptation, the consumers in general, are focused more on taste than upon health. From this perspective, Hershey is focusing upon Mexico and the Pacific Rim markets as two of its growth markets.

Hershey's International group is responsible for building global brands, developing growth platforms, increasing brand positioning and portfolio strategy. This group also develops market-specific insights, strategies and innovation for Hershey International.

In international markets, one of Hershey's strategic goals is to deliver sustainable innovation to improve their position in these key growth areas. Hershey believes that this approach would strengthen their position globally in sugar confections building a competitive position in the premium and value confectionery segments and supporting health and wellness product offerings. The "supporting health and wellness product offerings" are one key to profitable growth in fully developed markets which are focused upon healthy choice options (e.g., U.S.). Hershey has a goal of being a socially responsibility corporate citizen.

Hershey is focused on growing its presence in key international markets while continuing to build its competitive advantage in North America.

Additionally, Hershey is poised to expand its portfolio into categories beyond confectionery, finding new ways to bring goodness to people everywhere.

Hershey’s strong free cash flow as allowed Hershey to expand into other segment(s) and international markets.

Discussion Questions

1. What segment has Hershey expanded into?
2. Was this a good business decision?

Chapter 14

Wealth Creation

Learning and Assessment Goals

1. Understand what wealth creation is and how it is achieved.

2. Understand how the balanced scorecard can be utilized to provide a framework for assessing wealth creation.

3. Develop an understanding of financial ratios and how they are used.

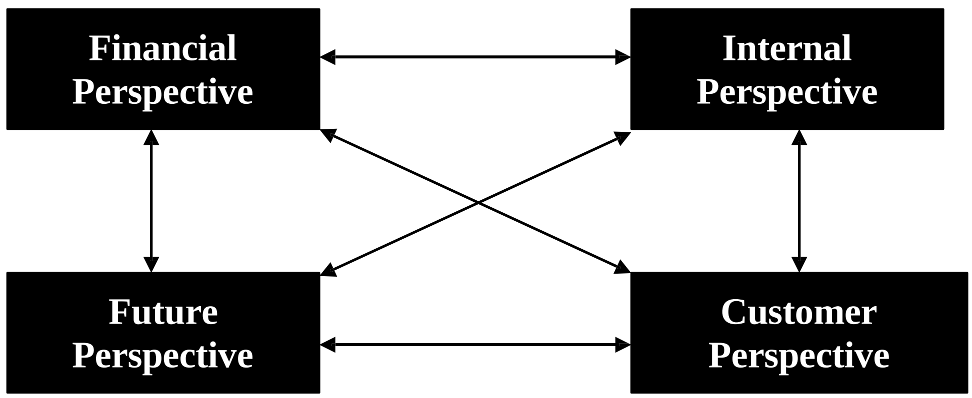
4. Understand the concepts of economic value added (EVA) and market value added (MVA).

In Chapter 13, we identified several groups of stakeholders: customers, shareholders, employees, and investment bankers as important groups for whom the firm needs to create wealth. Many stakeholders and firms utilize financial data to judge wealth.

Balanced Scorecard and Wealth Creation

While financial data can provide a wealth of information concerning a firm's historical performance, financial data does not predict future performance. In addition, financial measures are based on one firm alone with no competitive or industry data assessment. These limitations can be resolved by using the balanced scorecard. The balanced scorecard is illustrated in Figure 14.1.

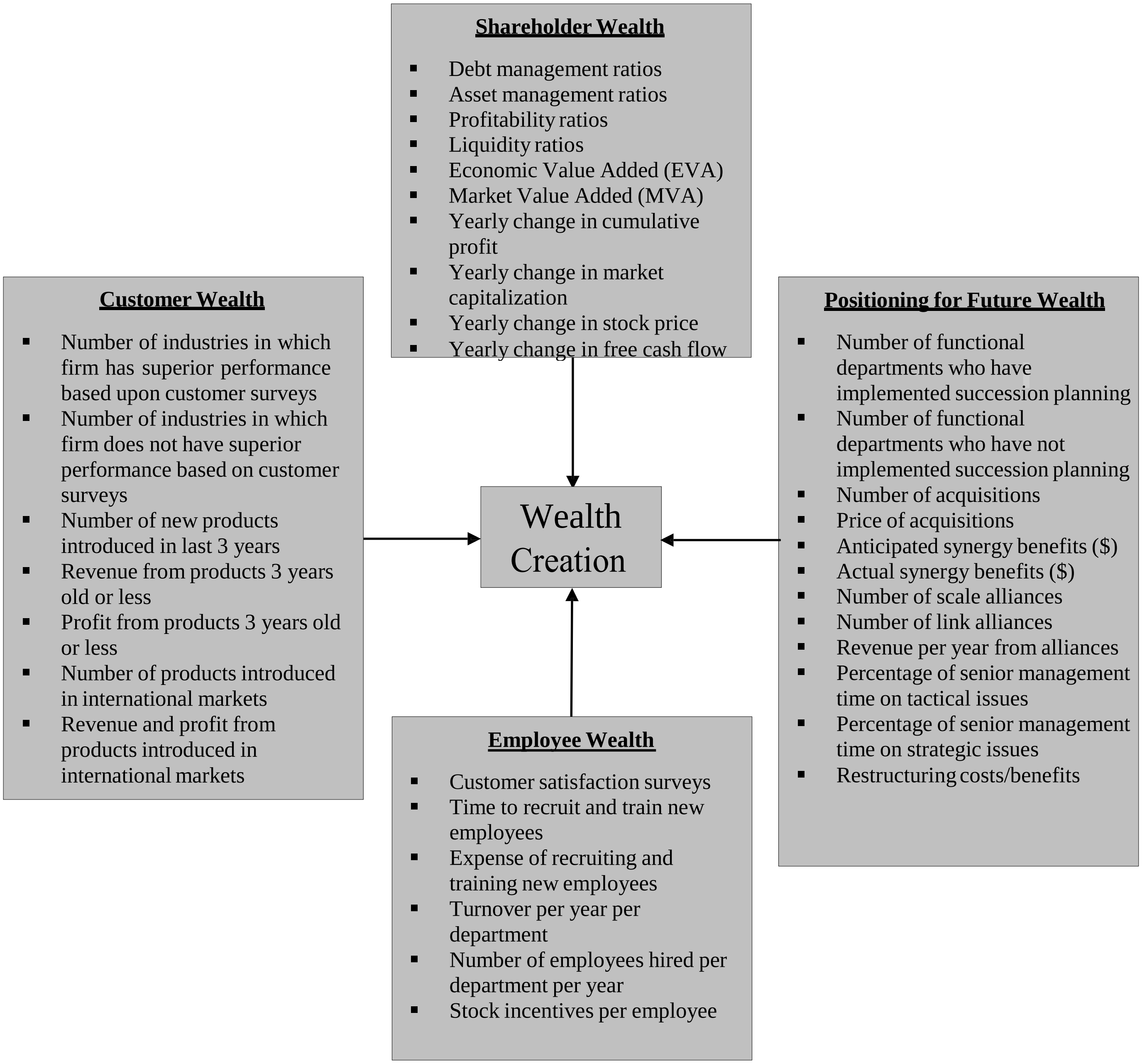
Figure 14.1
Balanced Scorecard



Source: Adapted from Kaplan, R. S., and D.P. Norton, "The Balanced Scorecard – Measures That Drive Performance," *Harvard Business Review* 72.1992.

The purpose of the balanced scorecard is to identify and monitor the key elements of a firm's strategy. Two of the four elements are oriented toward the future: (1) customer perspective and (2) future perspective. The balanced scorecard can be expanded to determine wealth creation. Figure 14.2 provides a model of wealth creation using the balanced scorecard.

Figure 14.2
A Balanced Scorecard for Wealth Creation



Financial perspectives from Figure 14.1 have been replaced with shareholder wealth in Figure 14.2. Shareholder wealth is a key success factor[1]. The firm must design its strategy to maximize shareholder wealth.

The internal perspective from Figure 14.1 has been replaced with employee wealth in Figure 14.2. In the long run, employees represent the only true source of wealth creation[2]. Employees represent intellectual capital. Intellectual capital can be rare, valuable, non-imitable, and non-substitutable[3]. Employees are integral components of wealth creation because they design and implement strategic and tactical actions which may add or detract wealth from the firm.

The customer perspective has been modified to include data that can be measured to create customer wealth.

The future perspective of the balanced scorecard has been expanded to focus upon positioning for wealth creation over time. The key to wealth creation is to meet or exceed stakeholders' expectations over time. Each aspect of wealth creation will now be discussed. We will begin with customers.

Customer Wealth

Creating wealth for consumers is critical for success. Increasing customer wealth is dependent upon how much better the firm meets the key buying criteria within each industry compared to competition. Firms may have multiple sources of revenue because they may have positioning in multiple industries. The first step is to identify what industries a firm is competing within. Industries can be defined by the Standard Industrial Classification (SIC), for U.S. domestic firms. The North American Industry Classification System (NAICS) is used for classifying firms within North America. The International Standard Industrial Classification (ISIC) is used to classify international firms outside North America. These classification systems were discussed in Chapter 1, Industry Analysis.

Once industry boundaries have been identified, it is important to ascertain a firm's performance within each industry. Chapter 4, Business Level Strategy, fully developed this issue, and explained how a firm can achieve competitive advantage. Chapter 5, Analysis of Markets and Positioning, examined the process by which firms can evaluate their position versus competitors on an industry-by-industry basis. A crucial component of this analysis is obtaining feedback from customers through the sales force. Chapter 11, Strategic Leadership Decision Making, discussed how firms could obtain such feedback. Examining the results of customer surveys is one approach that was discussed. A crucial point that has been addressed throughout the book is the sales force developing long-term relationships with customers. If these relationships exist, the sales force can communicate to senior leaders how the firm and competitors are positioned within each industry.

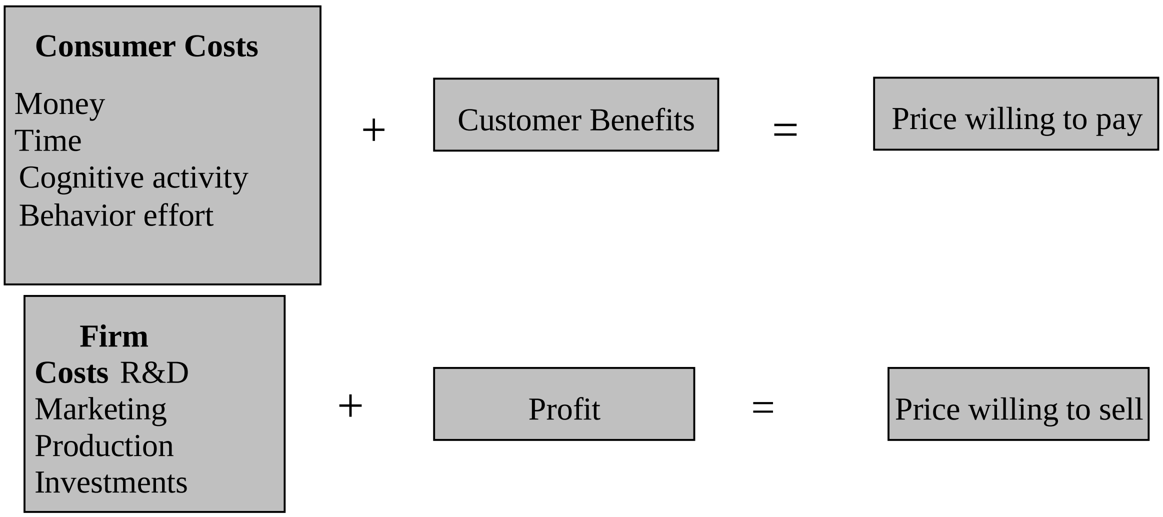
Based on this feedback from customers, the firm can judge where resources should be reallocated to maximize firm performance. Without this assessment on an industry-by-industry basis, the firm is more likely to engage in reactive as opposed to proactive decision-making. The industry analysis may determine that in some industries, the firm is not meeting the key buying criteria. If key buying criteria are not being met, the firm may need to develop new products that do meet key buying criteria.

Therefore, one wealth-creating statistic would be the number of new products introduced per year. Wealth can be determined by measuring the revenue and profit these new products generate. Another measure of wealth creation would consist of how much revenue and profits these new products have generated over time.

The success of new products is dependent upon the degree of benefit that customers obtain as opposed to the benefits obtained from competitors' products/services[5]. One way to measure this benefit is to determine the number of products competitors introduced per year and the revenue and profitability of those products. In many cases, product line profitability data is available in competitors' annual reports and 10-K reports.

However, superior products/services do not necessarily result in higher sales. Customers incur significant costs in terms of new product purchases. Figure 14.3 identifies the costs that consumers incur with respect to purchase of a product.

Figure 14.3
Consumer Purchasing Costs



Source: Adapted with permission of McGraw-Hill Irwin from *Consumer behavior and marketing strategy* by Peter J. and Olson J. 459. 2005.

Consumer Costs

Money is the usually what is exchanged when purchasing a product. However, customers can incur significant non-monetary costs. One such cost is time.

Time can be divided into two primary elements (1) amount of time consumers spend on learning about a product/service (cognitive activity) and (2) the physical time it takes consumers to stop what they are doing and purchase the product/service (behavioral effort)[6]. The perceived customer benefits plus the consumer costs will determine the price the consumer is willing to pay for the product/service. If the sales price is higher than the sum of consumer costs and customer benefits, the consumer will not engage in the transaction. Reducing customer costs results in additional benefits created for customers and increases the likelihood of engaging in continuous transactions with customers.

Firm Costs

The firm must make a profit on the products/services that it sells. Selling price is the refection of a number of key costs. One cost firms incur is R&D. R&D has two cost components: product R&D and process R&D. **Product R&D** is the costs that are incurred by developing new products.

With respect to product R&D, new products must be designed before they are implemented. Ideas for new product development can come from several sources. One way of obtaining new product ideas is from marketing research. Marketing research may entail approaches such as focus groups and customer surveys. The same results from multiple techniques will tend to create a more accurate picture for identifying customers' changing needs.

New products may generate additional costs. New product introduction may create changes in both inbound and outbound logistics. An infrastructure may need to be developed to move materials into manufacturing operations. In addition, an evaluation needs to be conducted to determine if existing outbound logistics are sufficient for moving new products to consumers on time.

If the firm is introducing products into new international markets, an infrastructure may need to be developed. Investments in plant and/or equipment to generate economies of scale and/or economies of scope may be substantial. Further, if the product is new to the firm, an international sales staff that has sold similar products may need to be hired.

Introducing new products does not necessarily increase wealth creation. Customer wealth may result from re-positioning existing products. As products age, they may become more attractive to other segments. An example would be the Play Station 2 (PS2) from Sony. The newer version, Play Station 3 (PS3) will be initially sold in the United States and Japan. However, production facilitates still exist for manufacturing PS2. To more fully utilize this capacity, Sony could sell PS2 products in developing markets. Because GDP per capita is significantly lower in developing countries, potential customers may not be able to afford new PS3's. The selling of PS2's in developing countries may begin to develop a new customer base for Sony. As these customers begin to earn higher GDP per capita in the future, they may be able to afford PS3's. Sony may be able to create wealth by offering new products to existing customers and offering existing products to new customers.

Firms can incur significant production costs manufacturing new products. Existing processes may need to be changed significantly for new product creation. These **process R&D** costs are changes in manufacturing that may need to be implemented to improve efficiencies. Examples include automation, flexible manufacturing, and six sigma. Process R&D initiatives, such as quality function deployment efforts, may also reduce R&D cycle time and/or increase demand.

As these costs increase, the firm needs to determine revenue, costs, and profits. To conduct this profit/cost trade-off, many firms utilize test markets. Test markets are beneficial because they can be used to determine actual sales and actual costs. This analysis will determine what price the firm needs to sell products/services. If this price is equal to or lower than customer costs and expected benefits, a transaction will occur. If not, no transaction will occur.

Shareholder Wealth

Most firms are in business to increase shareholder wealth. In other words, the price of the firm's stock needs to appreciate. There is a good reason for increasing the wealth of shareholders. If wealth is not created, shareholders will invest in other firms. Because increasing shareholder wealth is important, more firms are beginning to compensate senior management based upon firm performance. Cisco compensates all of its senior management team based upon changes in shareholder wealth. This approach to compensating senior management tends to reduce agency problems between senior management and shareholders.

Several firms have implemented processes for measuring shareholder wealth. Caterpillar initiated a new style of management reporting in 2004. Called Transparent

Financial Reporting, it aligns the company's internal management reporting system more closely with shareholders' returns. "It's much more 'live' in terms of what's actually happening as a shareholder would see it," stated Mr. Doug Oberhelman, the group president of Caterpillar who has oversight responsibility of the finance operation[7].

Procter & Gamble uses a model for calculating shareholder wealth called Total Shareholder Return (TSR). This model evaluates management performance by calculating bonus payments for senior managers based on firm performance[8]. One measure of shareholder wealth is obtained by examining financial ratios.

Financial ratios are important because they measure a firm's current and historical performance. Financial ratios can be classified into the following groups: (1) liquidity ratios, (2) asset management ratios, (3) debt management ratios, and (4) profitability ratios[9]. Liquidity ratios measure the firm's ability to converting assets into cash quickly and at low cost. Some of the important liquidity ratios are the following:

Liquidity Ratios

a. Current ratio:	$\dfrac{\text{current assets}}{\text{current liabilities}}$
b. Quick ratio:	$\dfrac{\text{current assets} - \text{inventory}}{\text{current liabilities}}$
c. Inventory to net working capital:	$\dfrac{\text{inventory}}{\text{current assets} - \text{current liabilities}}$ (net working capital)

The current ratio is a measure of the firm's ability to pay short-term liabilities from short-term assets. It measures the firm's potential cash reservoir. Decreases in this ratio over time are a signal the firm may have difficulty paying current expenses. The quick ratio measures the ability of the firm to meet its short-term obligations from current assets (not including inventory). The inventory to net working capital ratio refers to the degree to which the firm's working capital is tied up in inventory.

Asset Management Ratios

a. Inventory turnover:	$\dfrac{\text{sales}}{\text{inventory}}$
b. Fixed-asset turnover:	$\dfrac{\text{sales}}{\text{fixed assets}}$
c. Average collection period:	$\dfrac{\text{accounts receivables}}{\text{average daily sales}}$

Asset management ratios measure a firm's effectiveness at managing its assets. Inventory turnover measures the number of times that average inventory was turned over during the year. Fixed-asset turnover measures how much revenue is generated by each dollar of fixed assets. Average collection period is the amount of time required to receive payment after sales.

Debt Management Ratios

a. Debt-to-assets ratio:	$\frac{\text{total debt}}{\text{total assets}}$
b. Debt-to-equity ratio:	$\frac{\text{total debt}}{\text{total equity}}$
c. Long-term debt-to-equity ratio:	$\frac{\text{long-term debt}}{\text{total equity}}$

These ratios measure the extent to which a firms uses debt financing. If the firm earns more on investments financed with borrowed funds than it pays in interest, then its shareholders' returns are magnified, or "leveraged."

Debt management ratios reflect financing of operations. The total debt to total assets ratios measures the extent to which borrowed funds have been used to finance the firm's assets. The debt to equity ratio represents the ratio comparing funds provided by creditors to funds provided by stockholders. The long-term debt to total equity measures the balance between debt and equity.

Profitability Ratios

a. Gross profit margin:	$\frac{\text{Sales – cost of goods sold}}{\text{sales}}$
b. Net profit margin:	$\frac{\text{profits after taxes}}{\text{sales}}$
c. Return on assets:	$\frac{\text{earnings before interest and taxes (EBIT)}}{\text{total assets}}$
d. Return on equity:	$\frac{\text{profits after taxes}}{\text{total equity}}$

Profitability ratios represent how well a firm is allocating its resources. Gross profit margin represents the total margin available to cover operating expenses and generate a profit. Net profit margin ratio reflects how much profit is generated by each sales dollar. Return on assets (ROA) measures the return on total investments from stockholders and creditors. Return on equity (ROE) measures the rate of return on the book value of shareholders total investment in the firm.

Table 14.1 Ratio Analysis		
	Andrews	**Digby**
ROA (percentage)	9.8	5.6
Free Cash Flow ($ Millions)	22.52	58.86
Leverage (percentage)	2.0	2.6
ROE (percentage)	19.7	14.8
Stock Price	59.42	34.89
Sales ($ Millions)	224.5	188.4
EBIT ($ Millions)	38.88	32.79
Net Income ($ Millions)	18.01	11.51
Total Assets ($ Millions)	184.48	205.55

Table 14.1 provides data from the selected financial statistics for a capstone year. ROA is called the DuPont equation. This equation is derived from two primary ratios" EBIT and total assets. From the table we see that Andrews' ROA was 9.8% and Digby's ROA was 5.6%. This leads us to conclude that Andrews' return on total investments from shareholders and contractors was greater (9.8) than Digby's (5.6). Due to the differences, we would expect shareholders to move their funds from Digby to Andrews. Another option would be to reallocate their funds to other firms where ROA would be higher.

If investors decided to move funds from Digby to Andrews, Andrews may be able to obtain higher economies of scale in the traditional and low end segments. Another potential use of these funds would be to buy back stock. This could increase Andrews' stock price above its current price of $59.42 million (Table 14.1).

From Table 14.1 we see that Andrews' ROA is 9.8 and its ROE is 19.7. Digby's ROA is 5.6 and its ROE is 14.8. Both firms use debt to finance investments. The return investors obtain from Andrews is 19.7% which the Digby investors obtain a 14.8% return.

Digby has free cash flow of $58.86 million. This is too high of a position to have at the end of the year. As previously stated, Digby has a smaller plant than Andrews. This provides a competitive disadvantage in the traditional and low end segments. Some of this cash needs to be used to increase automation in the traditional and low end segments.

Economic Value Added (EVA) and Market Value Added (MVA)

While ratio analysis is beneficial for determining a firm's current performance, these financial measures cannot be utilized to determine a firm's future wealth. What shareholders desire are increases in wealth. Because shareholder wealth is based upon the future stream of cash flows, it is not calculated based upon historical performance. Shareholder wealth can be defined as the present value of the anticipated stream of cash flows added to the liquidation value of the company. As long as the returns from the firm exceed its cost of capital, the firm will add to shareholder wealth.

In addition, most profitability ratios only focus on the cost of debt, not the cost of equity. Economic value added (EVA) focuses on debt and equity. EVA is an estimate of a firm's economic profit for a specific year. EVA represents the income after the cost of debt and the cost of equity have been deducted. It measures the extent to which the firm has added to shareholder wealth[10]. EVA is calculated as follows:

> EVA = Net operating profit after taxes – After tax dollar cost of capital used to support operations.

One benefit of EVA is that it is a single performance statistic. It also tends to align the interests of shareholders and management because it reflects how effectively management uses capital.

Market value added (MVA) is another statistic which helps to align both shareholder and management interests. MVA is equal to market value less capital invested[11]. Shareholder wealth is increased by maximizing the difference between the market value of the firm's stock and the amount of equity capital that was supplied by shareholders. MVA is calculated as follows:

> MVA= Total market value – total capital = (Shares outstanding) (Stock price) – Total equity.

EVA and MVA have distinct differences. EVA is used to measure managerial wealth creation because its value can be calculated on a year-to-year basis. MVA is an indication of the wealth that has been created by the firm since its beginning.

Employee Wealth

A third group of stakeholders are the employees. The firm wishes to retain employees because of two primary reasons. The first reason is economic. If an employee leaves, the firm will spend time and money to recruit and train a replacement. Since your firm has already trained the employee, a competitor does not incur training costs. The second reason is knowledge transfer. If employees do not perceive that wealth is being created for them, they may decide to leave the firm and work for a competitor. All experience and knowledge that has occurred within your firm will now be available to competitors. This is important because employees build relationships with customers over time, and these customers may switch to the firm that the employee is moving to. In this case, the revenue that is lost to your firm goes immediately to the firm the employee moves to. The firm the employee is moving to may generate additional revenue at minimal cost. Creation of employee wealth is also crucial for other reasons.

Employees will dictate the long-run performance of the firm. Therefore, it is of critical importance that a firm generates wealth for employees. Employee satisfaction surveys, which should be distributed and scored without reference to specific employees, can be a measure of employee satisfaction. Employee turnover by department needs to be closely analyzed. In general, turnover should be approximately the same for each functional group. If it is not, a closer analysis of those departments generating higher turnover is required.

One of the best ways of retaining employees is to make them shareholders. Each year, United Parcel Service (UPS) rewards employees based upon how well the firm has performed during the year. Because these rewards are stocks, employees have an incentive to maximize

shareholder wealth. This reward system links the compensation of employees to stock price changes because all employees are rewarded for stock appreciation. If the company has a bad year, all employees within the firm aggressively search to find the source of the stock decline and implement corrective action quickly.
These actions increase wealth for the shareholders, the firm's senior management, and all other managers within the firm.

Positioning for Future Wealth

For the firm to create future wealth, it must design and implement its strategic plan. Some of the issues that need to be addressed are (1) expansion within domestic and international markets, (2) acquisitions and mergers, (3) costs and anticipated benefits of acquisitions, (4) restructuring, (5) resource utilization (6) implementation of strategic plan, (7) creation of strategic alliances, and (8) succession planning

Because employees represent the most important asset of any firm, succession plans must be developed to retain high performing employees. Most employees in firms want to advance. Many times, succession planning only addresses the CEO and senior management team. The plan should include general parameters for all employees. If employees are unaware of how they can advance within a firm, they may leave and join competitors that have more fully developed succession plans.

Succession planning affects many levels within a firm. Assume a new CEO is chosen from within the firm. Further assume that the former job of the new CEO was chief operating officer (COO) and the new COO was the chief financial officer (CFO). Assume that the new CFO was vice president of North American operations. The selection of an internal CEO puts in place a domino effect that impacts the entire organization.

Positioning for future wealth creation is due, in part, to identifying, acquiring, and implementing acquisitions. The price paid for each target firm needs to be evaluated versus the actual benefits (e.g. cost savings) realized. Chapter 9 covers acquisitions in depth. To determine changes in wealth, the wealth of the firm before the acquisition is compared to the wealth created after the target is totally integrated within the acquiring firm.

In order to engage in acquisitions, a firm may need to restructure existing businesses. The wealth created, as a result of the acquisition, needs to be compared to any restructuring that was needed to fund the acquisition. In general, acquisitions should add wealth to the firm, while restructuring should not result in decreases in wealth.

The number of strategic alliances a firm has entered into can also measure future wealth. Alliances may allow firms to generate increases in future wealth more quickly than other modes of growth (e.g. internal development). Scale alliances allow firms to combine similar resources to lower costs by increasing utilization of assets. Scale alliances allow firms to combine similar resources to grow quickly[12]. Scale alliances are also less expensive than acquisitions. In general, costs may be reduced because the firm is using the resources of partners.

Link alliances are formed by firms combining different resources to create new products/services[13]. Because firms are combining different resources, new sources of wealth may be created because they generate new resources for the firm. New resources, or new combinations of existing resources, provide new productive services, which creates wealth for the firm[14].

The relationship between tactical and strategic issues needs to be discussed.

Tactical issues are internal firm issues such as under-producing employees or more fully utilizing manufacturing facilities. Tactical issues will usually not have a significant impact upon financial performance. Lower levels of management are responsible for identifying and correcting tactical issues. This will allow time for senior management to be focused on creating shareholder wealth from a strategic perspective. It is the responsibility of the CEOs and senior managers to be focused on long-term wealth creation.

Many firms do not approach decision-making in this manner. Many CEOs and senior managers become immersed in tactical issues inside the firm. Tactical issues need to be dealt with by the function that is most closely affected. Lower levels of management have much greater knowledge than senior management as to the cause and solution of tactical issues. Resolving tactical issues is one reason why these managers are compensated. CEOs and senior management are paid to create a strategic vision and implement that vision to achieve long-term wealth creation. An internal focus is not oriented toward strategic issues (e.g. changes in industry structure, customers, competition, and/or domestic or international expansion). Positioning for future wealth cannot be done if senior level executives are focused on tactical issues. For example, while Hewlett Packard was trying to integrate the Compaq acquisition, Dell's strategy of aggressively building international market positions increased shareholder wealth.

Hewlett Packard's acquisition of Compaq resulted in decreases in shareholder wealth: HP lost 66% of the value of its stock between the date the acquisition was announced to the time the CEO resigned.

One quick way of creating greater wealth is to capitalize upon competitor's mistakes. Downsizing may be a weakness of many firms. By focusing on downsizing, as opposed to downscoping, firms are only addressing internal cost measures. By General Motors eliminating approximately 25,000 jobs per year, the firm is not addressing changing consumer needs. In many cases, downsizing results in reduction of human resources. This reduction in resources may create a situation where wealth is reduced because of loss in intellectual capital. By reducing wealth, firms may have less revenue. With less revenue the firm may cut additional resources. The cycle can continue indefinitely. Downscoping, on the other hand, does address changing consumer needs because it focuses resources on the profit generating segments of a firm's businesses.

All elements of the scorecard are interrelated. A firm's financial performance is a result of meeting consumer needs over time. Employees create wealth by building long- term relationships with customers and suppliers. By understanding how consumer needs change over time, the firm's senior managers can design and implement new strategies to improve financial performance. As a result of increases in financial performance, increases in cash flow may occur. The firm's CEO and senior management may then have sufficient funds to begin to generate additional sources of wealth for the firm. As the firm successfully positions for the future, customer, shareholder and employee wealth should all increase. It is the interconnectedness of these elements that provide for increases in wealth creation over time.

Figure 14.4: Apple Wealth Creation (2012)

Shareholder Wealth

Date	Stock Price
1985 (Steven Jobs ousted)	$1.98
1996 (Steven Jobs returns)	$5.88
2011 (Steven Jobs resigns)	$376.18
March 13, 2012	$568.10

Customer Wealth:

- Ability to create consumer needs
- Acquisition of intellectual capital

Wealth Creation

Positioning for Future Wealth:

- Release new products which Steven Jobs developed before he died
- Introducing Apple products into BRIC Markets with some price modifications

Employee Wealth:

- Stock options for lower level managers
- Employee payment for new products which are successful in the market place
- Succession planning

Capstone Simulation Measures of Wealth Creation

The Capstone Simulation uses three measures to calculate wealth creation. The first measure is free cash flow. Free cash flow is defined as the amount of funds that can be utilized for investments without any negative ramifications for the firm. One reason the simulation uses cumulative cash flow is to account for changes in inventory. In any one-year, inventory-carrying costs can have a substantial impact on cash flow. A cumulative value of cash flow will tend to stabilize the value of cash flow over time.

The second component of wealth creation the simulation uses is cumulative profit. Profit is a general statistic that is viewed as wealth creating. Profit is significantly impacted by a firm's investments. Large capital expenditures may significantly affect profit negatively for the year the investments are incurred. As with cumulative cash flow, cumulative profits are a better indication of wealth creation over time because investments usually stabilize over time. However, profits do not measure a firm's potential for generating wealth in the future. Shareholders only generate wealth as a result of stock appreciation or dividends.

A third component of wealth creation the simulation uses is market capitalization. Market capitalization is the stock price times the number of shares outstanding[15].

Table 14.2
Capstone Simulation Measures of Wealth Creation

	Firm 1	Firm 2
Stock Price	\$50 / share	\$50 / share
Market Capitalization	\$50 million	\$100 million
Stock Issue	No	Yes

A complete analysis of wealth creation should contain a detailed analysis of all factors in Figure 14.2. However, utilizing the Capstone criteria, Table 14.2 can be used to explain market capitalization.

If two firms have the same stock price (e.g. \$50/share) and firm 1 has a market capitalization of \$50 million and firm 2 has a market capitalization of \$100 million, firm 2 has generated more wealth[16]. Because firm 2 issued stock to fund investments, its stock price has been diluted. Since both firms have the same ending stock price, firm 2 would create more wealth because it has acquired more shares of stock while maintaining the same stock price[17].

Discussion Questions

1. What are the limitations of using only financial ratios to measure wealth creation?

2. Explain the concept of the balanced scorecard.

3. Why is employee wealth creation important?

4. What is economic value added (EVA)? How does it differ from market value added (MVA)?

5. Explain the difference between liquidity, asset management, debt management, and profitability ratios.

6. Explain "positioning for the future."

7. Explain how the Capstone Simulation measures wealth creation.

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Chapter 15

Conducting Case Analysis: An Exercise in Wealth Creation

The case method has been a proven mode of facilitating learning for decades. One reason is because cases represent firms that are in business today. As such, information and data with respect to current decision-making is available. Because of the Sarbanes-Oxley Act, financial statements must accurately reflect the performance consequences of firms' decision makers. Therefore, a firm's annual report and 10-K report provide accurate, current data with respect to current year decision-making.

A second reason why case analysis is an excellent learning vehicle is because it conveys how historical decisions have impacted a firm's performance. Historical decisions may constrain future decision-making. Firms that have had difficult relationships with large collective bargaining organizations (e.g. UPS) may be less flexible. The decision to outsource may be more difficult to implement for firms represented by collective bargaining organizations.

Sometimes a firm's historical decisions dictate what the firm can do in the future. Airbus is expecting the long haul (e.g. trans-pacific, trans-Atlantic) passenger business to represent the highest rate of growth. The A380 is the newest long haul aircraft in Airbus' fleet. If the long-haul market does not exhibit strong growth rates in the future, Airbus may not be able to respond to Boeing's new 787. The 787 is a short to medium range aircraft that can be used in developing markets (e.g. intra- China). If the long haul market does exhibit strong growth, Boeing already has the 777 long haul aircraft.

A third reason that cases are used is to exhibit questionable or sound decision-making and the consequences of these decisions. Oracle's acquisition of PeopleSoft was accepted because it represented a 75 percent share increase over market value. Proctor & Gamble's acquisition of Gillette represents the acquisition of the worldwide industry leader in the wet shaving industry.

Unfortunately, there is no model for a good case study. The primary reason is that professors have diverse perspectives on what constitutes a good case study. This may not be all bad. Students should feel free to ask professors what they perceive a good case analysis should include. Professors may provide you with examples of good case analysis. In addition, professors may offer examples of poor case study analysis. Remember, in this course, there is only one stakeholder (the professor).

It is important that the parameters be clear. In other words, what format does the professor prefer (e.g. history → situational analysis → recommendations)? An example may be helpful. Assume that we have been given the following case assignment.

Should a firm, not in the Capstone industry, enter the sensor industry? Explain why or why not from a wealth creation perspective.

One aspect of a case analysis that can begin to answer this issue is a review of the existing state of affairs. This is referred to as a situational analysis.

Figure 15.1
Case Study Analysis

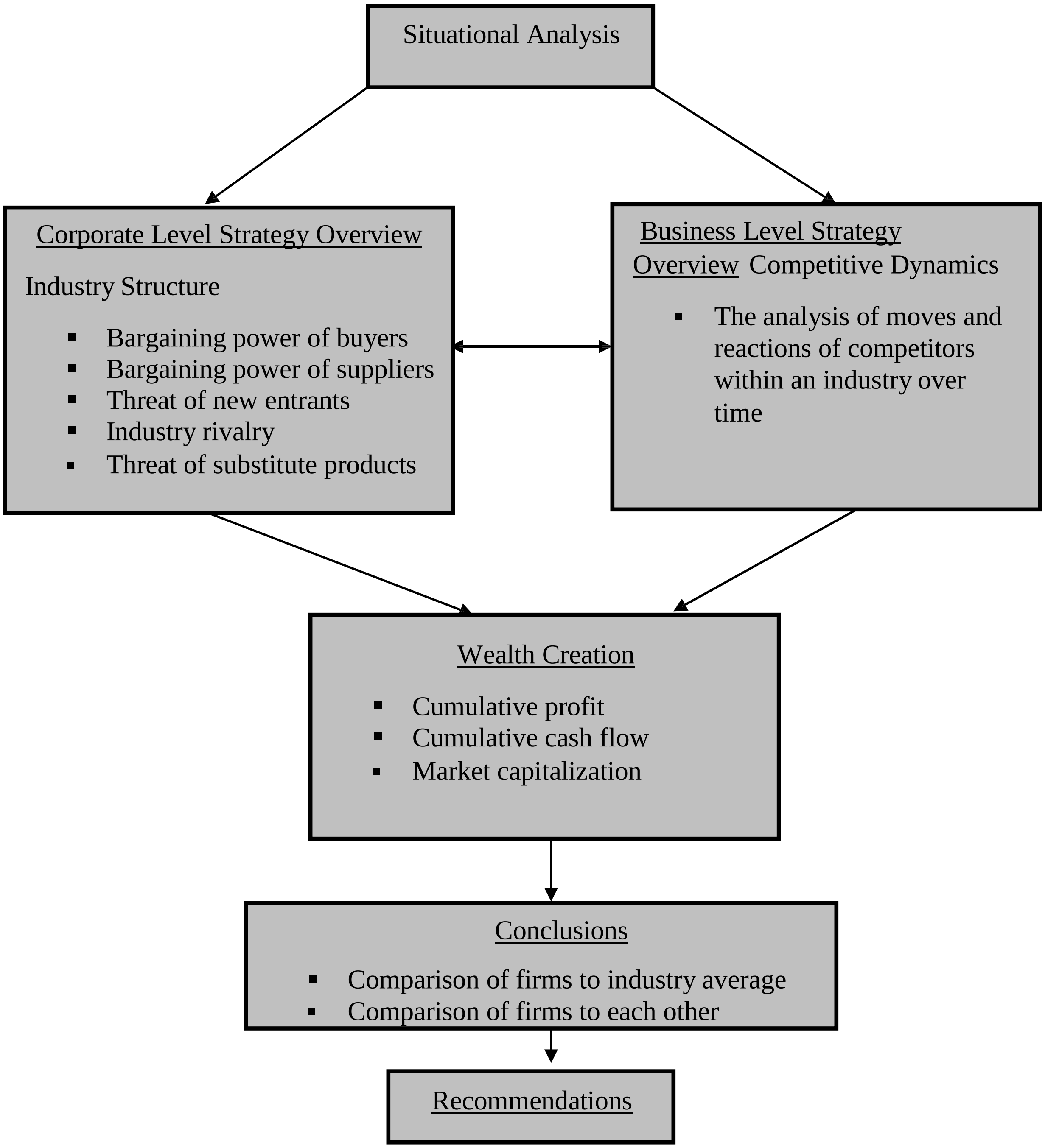


Figure 15.1 is only one example of how a case could be analyzed. The situational analysis is driven by corporate and business level strategy. The corporate level component can be addressed by Porter's 5 forces model. This model examines the structural characteristics of an industry. To address business level strategy, competitive dynamics is utilized. The benefit of competitive dynamics is that it examines decision making over time.

Based on the structural traits of the industry and the competitive dynamics that exist within it, it is possible to measure the amount of wealth that has been created or destroyed by each firm within the Capstone Simulation industry. These measures of wealth can be compared to other firms within the industry and to historical industry averages. A recommendation is then developed based on a complete analysis of these factors. We will begin with an analysis of industry structure. Let us assume that we have segment profiles for a firm for a round of a simulation game.

Industry Structure

Industry structure consists of five critical elements:

1) Threats of new entrants
2) Threats of substitute products
3) Industry rivalry
4) Bargaining power of buyers
5) Bargaining power of suppliers

Table 15.1
Segment Profiles

Section a	
Traditional Statistics	
Total Industry Unit Demand	**10,351**
Actual Industry Unit Sales	**10,351**
Segment % of Total Industry	28.4%
Growth Rate	**9.2%**

Section b	
Low End Statistics	
Total Industry Unit Demand	**14,290**
Actual Industry Unit Sales	**14,290**
Segment % of Total Industry	37.8%
Growth Rate	11.7%

Section c	
High End Statistics	
Total Industry Unit Demand	**4,512**
Actual Industry Unit Sales	**4,512**
Segment % of Total Industry	12.6%
Growth Rate	16.2%

Table 15.1 (Continued)

Section d Performance Statistics	
Total Industry Unit Demand	**3,938**
Actual Industry Unit Sales	**3,938**
Segment % of Total Industry	10.7%
Growth Rate	**19.8%**

Section e Size Statistics	
Total Industry Unit Demand	**3,848**
Actual Industry Unit Sales	**3,848**
Segment % of Total Industry	10.5%
Growth Rate	18.3%

Each segment of the industry is summarized in Table 15.1. By comparing each segment's demands and unit sales we see that demand for each segment has been met. Table 15.2 shows the production information for each firm.

Name	Primary Segment	Units Sold	Unit Inventory	2nd Shift & Overtime	Automation Next Round	Capacity Next Round	Plant Utiliz.
Able	Trad	991	322	0%	6.0	1,000	99%
Acre	Low	1,732	378	36%	8.0	1,400	134%
Adam	Trad	1,010	86	11%	8.0	900	110%
Aft	Pfmn	32	0	99%	4.0	1	198%
Agape	Size	52	27	99%	4.0	1	198%
Ate	High	691	177	100%	8.0	500	198%
Baker	Trad	1,081	215	0%	6.0	1,100	99%
Bead	Low	2,157	317	53%	8.0	1,500	152%
Bid	High	749	127	0%	4.0	850	87%
Bold	Trad	1,304	0	100%	5.0	1,000	198%
Buddy	Trad	1,225	70	85%	5.0	1,000	183%
Cake	Trad	1,077	133	0%	6.0	1,000	99%
Cedar	Low	2,378	349	59%	8.0	1,700	158%
Cid	High	637	94	0%	3.0	750	79%
Coat	Pfmn	1,055	45	12%	4.5	1,000	111%
Cure	Size	1,270	117	44%	4.5	1,050	143%
Daze	Trad	1,102	179	5%	5.5	1,000	104%
Dell	Low	1,927	352	50%	7.5	1,450	149%
Dixie	High	640	130	0%	3.0	800	80%
Dot	Pfmn	970	59	0%	4.0	1,000	99%
Dune	Size	1,411	136	53%	4.0	1,200	151%
Doom	Pfmn	862	38	70%	6.0	600	168%
Eat	Low	1,028	168	0%	8.0	1,400	67%
Ebb	Low	2,708	239	84%	8.0	1,650	182%
Echo	Trad	1,268	131	30%	6.5	1,000	129%
Egg	Trad	1,293	0	100%	5.0	1,000	198%
Fast	Low	596	79	0%	4.0	500	89%
Feat	Low	1,764	167	77%	6.0	1,150	176%
Fist	High	813	125	7%	3.0	750	106%
Foam	Pfmn	1,019	54	13%	5.0	850	111%
Fume	Size	1,115	180	28%	5.0	1,000	127%
Fox	High	982	92	100%	5.5	1,000	198%

Table 15.2
Production Information

The fact that many firms have positions in multiple segments is an indication that the industry is competitive both in terms of meeting demand in each segment (Table 15.1) and firms have multiple products in each segment (Table 15.2). As such, **threats of new entrants** would be **minimal**.

From Table 15.2, many firms have significant inventory. A plausible option is that firms may have overproduced because their sales forecasts are too high. In addition, products do not appear to be substitutable because of these high inventory levels. Having varying levels of inventory for products within a market segment is an indication that **products** are **not substitutable**.

Based upon the significant inventory levels, it would appear that firms do not have an understanding of key buying criteria on a segment by segment basis. Since the firm is not meeting key buying criteria, customers have no choice but to buy whatever products are available. Therefore, **bargaining power of buyers is low**.

Table 15.2 shows that all firms are producing in excess first shift plant capacity (plant utilization) on most production lines. Some firms are incurring substantial overtime. Firms may be able to reduce costs by adding a 2nd shift. This issue will need to be reviewed with the firms' collective bargaining organization (e.g. unions). Based on these factors, it would appear that firms are not having problems sourcing raw materials. The above factors would lead to the conclusion that **bargaining power of suppliers is moderate.**

The degree of rivalry in this industry is quite competitive. Firms are not meeting the needs of the customer. However, as can be seen from Table 15.2, virtually all firms are running their production lines with substantial overtime. Firms are competing aggressively with each other: demand for each segment is being met (Table 15.1). Even with significant growth rates in the high end (16.2 percent), performance (19.8 percent), and size segment (18.3 percent), firms are still running significant overtime. Most firms have substantial capacity in the traditional and low end products (Table 15.2). In addition, it can be seen from Table 15.2, many firms have high automation levels on their low end product lines. In addition, firms (Chester, Digby, and Ferris) have significant capacity in performance and size markets. Further, Baldwin and Erie have eliminated their performance and size products. Collectively, all of these decisions lead us to the conclusion that the **industry rivalry is high**.

Competitive Dynamics for the Capstone Simulation

From Chapter 4, Business Level Strategy, it is important to understand how firms have grown. A crucial aspect of growth is competitive dynamics. Competitive dynamics addresses firms' actions and reactions to competitors' actions and reactions. Competitors' actions and reactions can be examined from an analysis of production. Table 15.2 is a complete review of the production summary for all firms.

The production summary identifies opportunities that a new competitor may be able to capitalize upon. Refer to the 2nd Shift & Overtime column. Bead, Cedar, Dell, and Ebb are generating substantial overtime charges. Firms are under-producing because their sales forecasts are too conservative. Most firms are generating significant levels of overtime on many production lines. Since firms have ending inventory they should not expand capacity.

All firms, with the exception of Ferris, have significant automation of their low end products. Higher levels of automation increase efficiencies and lower costs. Investing in TQM initiatives is another way of reducing costs and reducing R&D cycle time. In general, firms may not be making enough investments to reduce costs of production (e.g. additional plant capacity, automation).

Table 15.3 provides financial data for each firm.

Table 15.3 Financial Leverage			
Firm	**Firm Leverage** **=** **Total Assets** **Total Equity**	**ROA**	**ROE**
Andrews	1.31	10.2%	13.1%
Baldwin	1.44	11.2%	15.8%
Chester	1.03	9.8%	9.2%
Digby	1.11	12.9%	13.3%
Erie	1.11	9.6%	10.8%
Ferris	1.00	11.8%	11.1%

Based upon Table 15.3, the firm's leverage range is from 1.00 to 1.44 percent. Firms are financing most of their expansion from equity. In general, firms have not utilized enough debt to obtain financial leverage. The balanced scorecard section of the simulation recommends a value between 1.8 to 2.8 for leverage. Leverage is important for two reasons: (1) by raising funds through debt, stockholders can maintain control of a firm without increasing their investment, and (2) if the firm earns more on investments financed with borrowed funds than it pays in interest, then its shareholders' returns, as measured by ROE, are magnified or "leveraged." With minimal debt financing, firms are restricted in terms of growth.

Wealth Creation Measures

Wealth creation could be measured from two primary factors:

1) Cumulative Profit
2) Market Capitalization

	Table 15.4 Wealth Creation				
Team	Cumulative Free Cash Flow ($Millions)	Cumulative Profit ($ Millions)	Stock Price ($)	Share Outstanding	Market Capitalization ($ Millions)
Andrews	38	40	70.46	1,820,931	128
Baldwin	25	34	53.84	2,134,410	115
Chester	32	35	61.25	2,069,366	127
Digby	37	39	66.42	2,064,739	137
Erie	16	24	43.76	2,234,181	98
Ferris	42	38	57.87	2,113,626	122
Industry Averages	32	35	59.93	2,072,288	121

Five teams (all except Erie) have cumulative profit which ranges from $34 million to $40 million (Table 15.4). The market capitalization for these firms ranges from $115 million to $137 million. Erie's low cumulative profit ($24 million) and market capitalization of $98, put it in position to be exploited by other firms. In addition, Erie has the least ($16 million) free cash flow. This restricts its ability to increase its value. Andrews and Ferris have much higher levels of free cash flow for investment purposes.

Conclusion

Figure 15.2 illustrates the results for this industry at the end of Round 8. From a corporate level strategy perspective the industry appears to be in the growth stage. The industry structure will permit new entrants. As far as competitive dynamics are concerned, firms do not appear to have well-developed strategies to maximize performance. Issues such as automation to reduce costs have not been implemented by most teams. Each teams' forecasting is not accurate and results in significant inventory levels. These mistakes are amplified by examining the wealth creation statistics. Firms are performing below industry averages on most factors (e.g. cumulative profitability).

Figure 15.2
Case Study Assessment

Situational Analysis

Corporate Level Strategy Overview

- Bargaining power of buyers: **low**
- Bargaining power of suppliers: **moderate**
- Threat of new entrants: **moderate**
- Threat of substitute products: **low**
- Industry rivalry: **high**

Business Level Strategy Overview

A new entrant could enter and take advantage of the following:

1) Baldwin has a product (Bead) which is not positioned well
2) Production facilities have significant overtime in low end market which may make the lines unprofitable without the inclusion of a second shift.
3) Excess ending inventory may be a result of sales forecasts which are too high.
4) Firms need to have adequate automation

Wealth Creation

- Cumulative profit: all firms below industry average
- Cumulative cash flow: all firms below industry average
- Market capitalization: except for Erie, all firms below industry average

Conclusion

- Industry structure provides for new entrants
- Firms within the industry do not understand competitive dynamics
- Firms within the industry are not creating as much wealth as “average” firms

Recommendations

1) Enter industry as new entrant
2) By using greater debt, firms can leverage themselves versus competition
3) Use excess funds to implement TQM initiatives
4) Increasing promotion budget to communicate products to customers and increase sales budget to build infrastructure
5) Develop a plan to outperform other firms’ products within each segment.
6) Capitalize on each segment’s demand growth
7) Automate price sensitive product lines

Recommendations

This review of corporate level strategy, competitive dynamics, and wealth creation leads to the conclusion that a firm should enter this industry and could be quite successful. Higher levels of financial leverage will allow the new firm(s) to grow at much faster rates than competitors. More accurate sales forecasting will allow the new entrant to capitalize on unmet demand. Investing significantly in TQM initiatives will create efficiencies and/or reduce R&D cycle time. This new entrant could develop a strategy for achieving a leadership position within each segment.

Chapter 16

Comp-XM®

Comp-XM: Example 1

Up until this point, many of your decisions with respect to the Capstone simulation have been made in groups by committee. Comp-XM provides an opportunity for you to make all the decisions over a several year time window. I will give you some pointers about what to look for and then we will go through a round of Comp-XM together.

The first point concerns scale of operation. If you have market segments that are price sensitive (such as the low end in Capstone), it is important to increase scale of operations. Investments in plant improvement provide for economies of scale, which will tend to reduce costs. As you invest in plant improvement, additional economies of scale will result. There is another way of obtaining efficiencies in price sensitive markets.

Automation will tend to increase efficiency and provide for additional economies of scale. However, you must be careful with automation. Automation makes it more difficult to reposition products because automation does not allow for flexible manufacturing processes. The following approach may be helpful. Increase plant capacity first and then automate in price sensitive market segments. As you invest in plant improvement, you can reposition products easier than if you had automated first.

Efficiencies can also be obtained as a result of some of the TQM initiatives: (1) continuous process improvements will reduce both material and labor costs, (2) JIT will reduce administrative costs, (3) quality initiative training will reduce labor costs, (4) benchmarking will reduce administration and inventory carrying costs, (5) concurrent engineering will reduce material and labor costs. Positioning is also a crucial element.

While Comp-XM uses the same key buying criteria as Capstone, the weights on each criterion are different. For example, the thrift market segment has 55 percent of the customer buying criteria as price. This should be treated as a cost leadership segment. The elite segment should be treated as a differentiation segment because 34 percent of the customer buying criteria is based upon an age = 0. With age = 0, it is necessary to invest in new product development. Positioning accounts for 22 percent of the customer buying criteria. The key to positioning is to have your product positioned superior to competitors on the customer buying criteria.

Another key element is forecasting. The basic trade-off is between running out of cash and running out of inventory. Forecasting too high leads to inventory carrying costs and forecasting too low means not obtaining sales that would have been available if forecasting had been more optimistic. Because of this trade-off, it is important to forecast a range and then adjust the estimates based upon how well your products meet the customer buying criteria.

As in capstone, forecasts are obtained by taking the segment demand and multiplying by the segment growth rate. If you divide by 6 (assuming there are 6 firms in the segment), you are estimating that you will gain 1/6 of the segment. Let us use an example.

Table 16.1a Size Market Segment Analysis	
Size Statistics	
Total Industry Unit Demand	3,885
Actual Industry Unit Sales	3,885
Segment % of Total Industry	10.5%
Next Year's Segment Growth Rate	18.3%

Table 16.1b Size Customer Buying Criteria		
	Expectations	Importance
1. Ideal Position	Pfmn 6.8 Size 6.6	43%
2. Age	Ideal Age = 1.5	29%
3. Reliability	MTBF 16000-21000	19%
4. Price	$23.00 – 33.00	9%

Table 16.1c
Top Products in Size Segment

Name	Market Share	Units Sold to Seg	Revision Date	Units in invent-troy	Pfmn Coord	Size Coord	List Price	MTBF	Age Dec. 31	Promo Budget	Cust. Awareness	Sales Budget	Cust. Accessibility	Dec. Cust. Survey
Dune	36%	1,411	9/25/2015	136	7.2	6.4	$33.50	19000	1.30	$1,200	74%	$1,586	44%	37
Cure	33%	1,270	9/21/2015	117	6.8	6.6	$32.00	17000	1.35	$1,150	66%	$1,591	43%	37
Fume	29%	1,115	11/11/2015	180	6.8	6.0	$33.00	17000	1.19	$1,300	74%	$1,278	37%	30

The segment demand for next year is the segment demand times the growth rates. For the size segment next year demand is (3885)(1.183) = 4595 units. One word of caution is needed. In the real world, demand cannot be predicted with certainty. As such, it is important to obtain a forecast range. For illustrative purposes, refer to Chapter 5, Analysis of Markets and Positioning, for ways of forecasting a range. For purposes of this example, we will use the 4595 units from here forward as the demand for the segment.

A calculation that is somewhat helpful is to not only calculate the demand for the segment but also calculate the capacity of each firm for the next year. From Table 16.2 we can calculate the production capacity for each firm for next year.

Table 16.2 Capacity and Net Margin Analysis Size Segment			
Product	1st Shift Capacity Next Round (units)	Plant Utilization This Year (Percent)	Net Margin ($)
Dune	1200	151	7771
Cure	1050	143	6868
Fume	1000	198	6003
	3250		

From the capacity analysis, we see that next year's 1st shift capacity (3250) is not sufficient to meet the demand for next year (4595 units). Currently, Dune is operating its Dune line at 151 percent (Table 16.2). It is also generating 136 units of inventory (Table 16.1c). We need to examine Dune's profitability. From a product line profitability perspective, the productivity of each line is obtained from the income statement. This report shows that Dune is the 2nd most profitable product that Digby produces. Dell (low end) is the most profitable product for Digby (Table 16.3).

Table 16.3 Product Line Profitability –Digby		
Segment	Product	Net Margin
Traditional	Daze	5438
Low End	Dell	11,456
High End	Dixie	2558
Performance	Dot	2727
Size	Dune	7771

Since this is a high margin product for Digby we need to determine why Dune is generating inventory. Dune has the greatest market share (36 percent) of all products in the size segment (Table 16.1c). Positioning is 43 percent of the customer buying criteria table 16.1b. Within the segment, Cure is at the optimal position (6.8 performance, 6.6 size). Dune needs to R&D its product to the optimal coordinates for next year. By R&Ding the Dune product, its new age will be different based on its release date at its release date the age will be cut in half).

There is a criterion that all these products do not meet. Products in this segment can move reliability up to 21,000. This criterion for all firms is below 21,000. This is 19 percent of the decision: Dune will be more attractive if it increases its MTBF. As stated in the 2012 team member guide, "A product's demand is driven by its customer survey score." Since Cure's customer survey score is 37, there is ample opportunity to increase the score significantly.

Comp-XM: Example 2

Based upon the selected statistics (Table 16.4), your firm (Andrews), had an emergency loan of $21,076,058. We need to understand what caused this loan. One place to start is with the cash flow statement (Table 16.6). Andrews invested $20,000 in plant improvement. Investments in plant improvements are wise because the thrift segment is growing at 11 percent (Table 16.8a), the core segment at 10 percent (Table 16.9a), the nano segment at 14 percent (Table 16.10a), and the elite segment at 16 percent (Table 16.11a).

However, from the cash flow statement (Table 16.6), Andrews also retired $42,201 of current debt. These investments were financed by the issuing of $5,000 in common stock. No long term debt was issued to finance the long term investments. The cause of the emergency loan resulted from the retirement of $42,201 of current debt plus the $20,000 in plant investment. Andrews had $36,125 in net cash from operations (Table 16.6) and the issuance of $5,000 in common. By not funding these investments with long term sources (e.g. long term debt), Andrews' decision resulted in an emergency loan of $21,076,058.

With respect to the impact of Andrews' decisions, the stock market summary shows that the stock price rose by $4.92 to close at $52.63 for the year. The majority of this increase was due to the earnings/share ratio of $6.77 (Table 16.5). Remember that changes in stock price are due to changes in earnings per share, book value, and dividend policy.

The production information (Table 16.7) illustrates how well products are positioned within the four market segments. The Aft product had an inventory of 387 units. By examining the nano market segment (Table 16.10a), the industry demand of 4741 units was met. As such, firms are likely to have inventory built up. Let us examine the top products in the segment to determine why Aft had an inventory of 387 units.

Within the nano segment (Table 16.10a), positioning is the most important key criteria at 35 percent while price is 27 percent of the customer buying criteria. Let us examine price first. The Aft product has the highest price ($38.00) of any product in the segment (Table 16.10b). Since the price range is $28 - $40, products that are priced at $38 need to be very well positioned. For Aft, the size coordinate needed to be closer to the ideal size coordinate (5.3) to generate more sales. Positioning closer to the ideal size coordinate and reducing price would have significantly reduced Aft's inventory in this segment. Let us examine the Agape product.

Referring back to the production information (Table 16.7), the Agape product in the elite segment has 665 units in inventory. The total unit demand for the elite segment was 4,678 units (Table 16.11a). This segment's demand was met which means that some firms had inventory. The two most important customer buying criteria in this segment were age (34 percent) and price (24 percent) (Table 16.11a). Positioning is also important (22 percent).

Agape's age is 1.6 years, which is higher than the Beetle age of 1.2 years and the Deft age of 1.1 years (Table 16.11b). The ideal age for this segment is zero (0). Agape's price ($42.00) is also higher than any other product in the segment. $42 is also at the top of the price range for this segment. The Agape product is not price competitive in this segment: price is 24 percent of decision. If Agape is to be competitive in this segment, it either needs to reduce its price and/or engage in new product development. New product development is important in this segment because the ideal age is 0 and age represents 34 percent of the customer buying criteria. Let us examine the Abby product.

Referring back to the production information (Table 16.2), the Abby product in the thrift segment has 304 units in inventory. Referring to the customer buying criteria for the thrift segment (Table 16.8a), the unit demand of 6,285 units was met. The two dominant customer buying criteria for this segment are price (27 percent) and MTBF (20 percent).

Referring to the top products in the segment (Table 16.8b), the Abby product has a price of $20, which is higher than all other competitors within this segment. Since price is 27 percent of the decision (Table 16.8a), Abby has inventory because it is not priced competitively. This thrift market is very price sensitive and Abby is going to have to reduce its price. To maintain its margins on the product, Andrews has two options (1) buy capacity on this line and/or (2) increase automation. Buying capacity before automating will have a tendency to reduce costs and provide for economies of scale. Increasing automation will increase efficiency. Let us examine the Alan product.

Referring back to the production information (Table 16.7), the Alan product in the core segment has 0 inventory. The core segment had a segment demand of 8078 (Table 16.9a). The segment demand was met. The four competitors had no inventory in this segment. Alan's price ($26) is a little higher than Cent ($25) and Cake ($25). It is significantly higher than the industry leader Dune ($20). Alan's age of 3 is significantly higher than Cent (1.1), Cake (1.1), and Dim (.8). Since the ideal age for this segment is 2.0, Alan will need to R&D this product to remain competitive for next year.

From the production information (Table 16.7), Alan has a 5.5 level of automation in the core segment. Both of Chester's core products and Digby's Dune product have higher automation levels. At higher levels of automation, firms create greater efficiencies. It also would be wise to add plant capacity for the next year because Alan has 1,320 units of capacity next year while Chester has 2,428 units of capacity: 1,139 from Cake and 1,289 units from Cent (Table 16.7). The capacity in this segment for next year can be determined by adding the capacity for next year and doubling that number to arrive at both first and second shift capacity. Capacity = 2 (1,320 + 1,139 + 1,289 + 1,040 + 1,800) (Table 16.7). Total capacity for this core segment is 9,576 units. Total core segment demand (Table 16.9a) is the number of units sold this year (8,078) times (1.10), which is equal to 8,886 units. If all firms run at 100 percent of both first and second shift capacity, the segment will have inventory. Make certain your products meet the customer buying criteria (Table 16.9a) to avoid having inventory in this segment.

From the production information (Table 16.7), it can be seen that Andrews has a new product, (A-Elit), which will be introduced in the next round. Thrift and core would not be markets for new products because they are cost based segments (Table 16.8a, Table 16.10a). Nano is a segment for products that need to be repositioned. Positioning is 35 percent of the customer buying criteria. Ideal age = 1 (Table 16.10a).

The elite segment is for new products because the segment has ideal age = 0, which is 34 percent of the customer buying criteria (Table 16.11a). As Agape ages, A-Elit should be positioned within the elite segment. All other products will be older in this segment (Table 16.11b). In addition, Chester has exited this segment. This elite segment also has the highest growth rate (16 percent) of all segments. Table 16.12 is a summary of decisions for team Andrews for the next round.

Balanced Scorecard

The balanced scorecard is the assessment vehicle by which Comp-XM is measured. The balanced scorecard has both quantitative and qualitative measures for the primary assessment goals of financial, internal business process, customer criteria, and learning and growth. The factors that are included in each category are listed in Table 16.13.

Based upon the results of the balanced scorecard, each firm will know what aspects of the balanced scorecard are strong and which needs improvement. We will briefly review some aspects of the balanced scorecard for team Andrews. Let us begin with some of the financial measures.

Financial

Stock price during the round grew by $4.92 (Table 16.5). Profits increased by $14,613,055 (Table 16.4). From a financial perspective, Andrews ranks 2 based on the 4 teams. We will briefly review the customer criteria.

Customer

Andrews is having difficulty meeting the customer buying criteria: Aft has 387 units in inventory, Agape has 665 units in inventory, and Abby has 304 units in inventory (Table 16.7). Andrews is poorly positioned in 3 of the 4 segments. These products need to be re-positioned and/or new products need to be developed. A-Elit should be positioned in the elite segment. Andrews needs to make the changes identified in Table 14.12 if it is to meet the customer factors of the balanced scorecard. The internal business processes will be briefly reviewed.

Internal Business Process

Contribution margin is 32.8 percent, which is similar to the other teams (Table 16.4). Andrews is making good plant utilization on its Aft, Agape, and Abby products. However, Alan has a plant utilization of 68 percent (Table 16.7). The core segment has no inventory (Table 16.9b). However, Alan has the poorest position on the customer buying criteria (Table 16.9a). Repositioning of this product is required if Andrews is planning on increasing its plant utilization of 68 percent (Table 16.7). Because Aft, Apage, and Abby have significant levels of inventory, each of these products will generate significant inventory carrying costs.

The learning and growth criteria of the balanced scorecard cannot be measured because the human resources and TQM modules have not been activated. HR and TQM are the primary factors which impact the learning and growth segment of the balanced scorecard. Refer to Chapter 3, Utilizing Internal Assessment to Build Competitive Advantage Over Rivals, for a complete review of all TQM initiatives. Let us conduct a complete review of this example.

Table 16.4
SELECTED FINANCIAL STATISTICS

	Andrews	Baldwin	Chester	Digby
ROS	8.2%	9.6%	-6.8%	-0.8%
Turnover	1.21	1.33	.70	.74
ROA	9.9%	12.8%	-4.8%	-0.6%
Leverage	1.9	1.9	3.9	2.7
ROE	18.6%	24.8%	-18.6%	-1.5%
Emergency Loan	$21,076,058	$0	$3,900,058	$0
Sales	$179,117,651	$176,393,832	$134,384,005	$136,815,960
EBIT	$31,206,059	$32,620,563	$3,305,202	$11,850,467
Profits	$14,613,055	$16,915,956	($9,158,582)	($1,041,356)
Cumulative Profit	$20,476,056	$31,039,832	($13,317,625)	$3,557,192
SG&A % Sales	7.5%	7.0%	10.3%	12.9%
Contrib. Margin %	32.8%	34.0%	30.5%	33.8%

Table 16.5
STOCK MARKET SUMMARY

Company	Close	Change	Shares	Book Value	EPS	Dividend
Andrews	$52.63	$4.92	2,159,875	$36.38	$6.77	$0.00
Baldwin	$75.52	$7.92	2,061,420	$33.02	$8.21	$0.87
Chester	$7.16	($7.75)	3,432,012	$14.33	($2.67)	$0.00
Digby	$28.83	($12.50)	2,634,377	$25.92	($0.40)	$0.00

Table 16.6 CASH FLOW STATEMENT				
Net cash from operations	$36,125	$25,423	$12,314	$13,100
Cash flows from investing activities				
Plant improvements (net)	($20,000)	($35,100)	($54,101)	($63,960)
Cash flows from financing activities				
Dividends paid	$0	($1,787)	$0	$0
Sales of common stock	$5,000	$0	$8,530	$16,227
Purchase of common stock	$0	$0	$0	$0
Cash from long term debt issued	$0	$17,994	$29,958	$33,585
Early retirement of long term debt	$0	$0	$0	$0
Retirement of current debt	($42,201)	($5,400)	($14,573)	($7,772)
Cash from current debt borrowing	$0	$7,620	$13,972	$9,216
Cash from emergency loan	$21,076	$0	$3,900	$0
Net cash from financing activities	($16,125)	$18,427	$41,787	$51,255
Net change in cash position	$0	$8,751	$0	$395
Balance Sheet Survey	**Andrews**	**Baldwin**	**Chester**	**Digby**
Cash	$0	$13,343	$0	$6,245

Table 16.7 PRODUCTION INORMATION							
Name	**Primary Segment**	**Units Sold**	**Units in Inventory**	**Age Dec. 31**	**Automation Next Round**	**Capacity Next Round**	**Plant Utiliz.**
Aft	Nano	1,443	387	1.6	4.5	1,190	115%
Agape	Elite	1,027	665	1.6	4.5	1,080	119%
Abby	Thrift	2,095	304	3.4	6.5	1,700	105%
Alan	Core	1,508	0	3.0	5.5	1,320	68%
A-Elit		0	0	0.0	3.5	1,000	0%
Bold	Nano	1,669	121	1.3	6.0	1,250	160%
Buddy	Elite	812	314	2.4	6.5	1,000	124%
Bat	Nano	1,289	70	1.2	6.0	1,100	134%
Beetle	Elite	1,202	64	1.2	6.0	1,050	124%
Coat	Thrift	2,063	318	2.8	8.9	1,935	124%
Cure	Thrift	1,955	506	2.7	8.9	1,996	128%
Cake	Core	1,349	0	1.1	8.0	1,139	123%
Cent	Core	1,533	0	1.1	8.0	1,289	124%
Dot	Thrift	1,079	437	3.5	9.5	1,400	88%
Dune	Core	2,178	0	2.1	8.0	1,800	132%
Dart	Nano	1,045	43	1.0	6.0	900	141%
Deft	Elite	790	49	1.0	6.0	700	122%
Dim	Core	743	0	0.8	7.0	1,040	149%
Don		0	0	0.0	7.0	600	0%

Thrift

Table 16.8a	
Total Industry Unit Demand	6,285
Actual Industry Unit Sales	6,285
Segment % of Total Industry	26.4%
Growth Rate	11.0%

	Expectations	*Importance*
1. Ideal Position	Pfmn 12.1 Size 5.3	35%
2. Price	$28.00 – 40.00	27%
3. Age	Ideal Age = 1.0	20%
4. Reliability	18000 – 24000	18%

Table 16.8b TOP PRODUCTS IN SEGMENT								
Name	Market Share	Units Sold to Seg.	Units in Inventory	Pfmn Coord.	Size Coord.	List Price	MTBF	Age Dec. 31
Cure	26%	1,644		8.0	12.0	$15.00	17000	2.7
Abby	25%	1,561		6.8	13.1	$20.00	20000	3.4
Coat	24%	1,520		7.8	12.2	$16.00	17000	2.8
Dot	14%	876		7.0	13.0	$18.00	14000	3.5

Table 16.9a Statistics	
Total Industry Unit Demand	8,078
Actual Industry Unit Sales	8,078
Segment % of Total Industry	34.0%
Growth Rate	10.0%

	Expectations	*Importance*
1. Price	$20.00 – 32.00	46%
2. Age	Ideal Age = 2.0	20%
3. Reliability	MTBF 16000 – 22000	18%
4. Ideal Position	Pfmn 10.2 Size 9.8	16%

Table 16.9b TOP PRODUCTS IN SEGMENT								
Name	Market Share	Units Sold to Seg.	Stock Out	Pfmn Coord.	Size Coord.	List Price	MTBF	Age Dec. 31
Dune	23%	1,862	YES	9.4	10.6	$20.00	16000	2.1
Cent	16%	1,323	YES	11.6	9.0	$25.00	20000	1.1
Alan	14%	1,164	YES	8.6	11.4	$26.00	22000	3.0
Cake	14%	1,156	YES	10.9	8.5	$25.00	18000	1.1
Dim	9%	721	YES	10.0	10.0	$21.00	16000	0.8

Nano

Table 16.10a Statistics	
Total Industry Unit Demand	4,741
Actual Industry Unit Sales	4,741
Segment % of Total Industry	19.9%
Growth Rate	14.0%

Customer Buying Criteria 16.10a		
	Expectations	*Importance*
1. Ideal Position	Pfmn 12.1 Size 5.3	35%
2. Price	$28.00 - $40.00	27%
3. Age	Ideal Age = 1.0	20%

Table 16.10b
TOP PRODUCTS IN SEGMENT

Name	Market Share	Units Sold to Seg.	Stock Out	PfmnCoord.	Size Coord.	List Price	MTBF	Age Dec. 31
Bat	24%	1,130		13.1	4.8	$37.00	23000	1.2
Aft	22%	1,042		11.6	6.4	$38.00	24000	1.6
Bold	21%	1,009		12.0	6.0	$32.00	23000	1.4
Dart	18%	868		12.1	5.5	$30.00	18000	1.0

Elite

Table 16.11a Statistics	
Total Industry Unit Demand	4,678
Actual Industry Unit Sales	4,678
Segment % of Total Industry	19.7%
Growth Rate	16.0%

Customer Buying Criteria		
	Expectations	*Importance*
1. Age	Ideal Age = 0.0	34%
2. Price	$30.00 - $42.00	24%
3. Ideal Position	Pfmn 14.7 Size 7.9	22%
4. Reliability	MTBF 20000-26000	20%

Table 146.11b
TOP PRODUCTS IN SEGMENT

Name	Market Share	Units Sold to Seg.	Stock Out	PfmnCoord.	Size Coord.	List Price	MTBF	Age Dec. 31
Beetle	23%	1,054		15.0	7.0	$39.00	25000	1.2
Agape	21%	982		14.5	8.2	$42.00	26000	1.6
Buddy	17%	812		15.2	7.5	$35.00	25000	2.5
Deft	13%	618		14.9	7.7	$34.00	20000	1.1

Table 16.12
SUMMARY OF DECISIONS FOR ANDREWS

PRODUCT	RECOMMENDATIONS
Aft	Reduce price R&D performance and size coordinate Increase MTBF to 24,000
Agape	Buy capacity Introduce new product in this segment Reduce Agape price R&D performance and size coordinate for Agape
Abby	Reduce price Increase capacity and/or invest in automation
Alan	Add capacity Increase capacity and/or invest in automation
A-Elit	Introduce this new product into Elite segment Add capacity

Table 16.13
BALANCED SCORECARD

Financial	**Internal Business Process**
Stock Price Profits Leverage	Contribution Margin Plant Utilization Days of Working Capital Stock-out Costs Inventory Carrying Costs
Customer	**Learning and Growth**
Customer Buying Criteria Customer Awareness Customer Accessibility Product Count SG&A Expense	Employee Turnover Rate Employee Productivity TQM Material Reduction TQM R&D Reduction TQM Admin Cost Reduction TQM Demand Increase

As CEO of your own firm (Andrews), you will be called to answer questions generated from your Board of Directors. These questions can be focused upon any aspect of your firm, the competition, and the position your firm occupies within its industry(s). Board inquiry questions will be focused upon how your firm can gain and maintain competitive over rivals. Several board inquiry questions are provided.

Board Query Questions

1. What primary error did Andrews make which led to their emergency loan?
   a) Did not automate its products sooner
   b) Did not finance long term investments with long term debt
   c) Borrowed by issuing sale of common stock
   d) Did not purchase enough short term debt

2. Why is Chester losing money?
   a) Significant inventory in Coat and Cure products
   b) Weak position in Nano segment
   c) Has exited Nano and Elite segments
   d) Has no long term sources of debt to finance plant improvements

3. Which firm(s) may drive Chester out of business?
   a) Andrews
   b) Baldwin
   c) Digby
   d) Andrews and Baldwin

4. What should Baldwin do to maintain its strong profit position?
   a) Reposition Bold and Buddy
   b) Increase automation on Buddy
   c) Introduce a new product in Elite
   d) Exit Nano segment
   e) a, b, c
   f) a, c
   g) All

5. What actions should be taken to increase market share in the thrift segment?
   a) Reduce price
   b) Increase reliability to 20,000
   c) New product creation
   d) Sell product below $14
   e) a, b
   f) a, b, c
   g) c, d

6. What type of generic business strategy is Chester following?
   a) Cost leadership
   b) Focus differentiation
   c) Differentiation
   d) None of the above

7. Which of Porter's five forces model are relevant to this industry?
   a) Barriers to entry are high
   b) Firms follow a combination of cost leadership and differentiation
   c) Bargaining power of customers is high
   d) Industry rivalry is low
   e) a, c
   f) a, b, c

8. Why didn't firms within the Core segment generate inventory?
   a) Accurate forecasting
   b) Chester has two products in the segment
   c) Core is a price sensitive market: firms sold products at lower end of price range
   d) Low segment growth rate

9. What segment should the Don product be positioned in?
   a) Nano
   b) Elite
   c) Thrift
   d) Core
   e) A case could be made for each segment

10. Which segment(s) focuses upon cost leadership and differentiation?
   a) Nano
   b) Elite
   c) Thrift
   d) Core
   e) a, b, d
   f) a, b, c
   g) All

11. Why is Chester's stock price so low?
   a) Too much use of issuing shares to fund growth
   b) EPS is lower than other competitors
   c) Book value is too low when compared to other firms
   d) All of the above
   e) A, B
   f) C, D

12. Why did Digby lose money this year?
   a) New product introduction
   b) Too much overtime
   c) Too much inventory
   d) Entering new segments which it currently did not have positions

13. What does Baldwin need to do to continue to generate more profit than Andrews next round?

a) Increase automation on core product line
b) R&D Buddy product
c) Develop new product for core segment
d) R&D Bat product
e) a, b
f) a, b, c
g) All of the above

14. What can Chester do to improve its EPS?
a) Must have favorable price position in thrift segment
b) Needs to R&D Core product
c) Sell off capacity in Coat product to reduce inventory
d) Buy back stock while still maintaining positive free cash flow
e) a, b
f) b, c
g) a, d

15. Why did Digby's stock price go down this specific year?
a) It has too many shares outstanding
b) It is not meeting customer buying criteria in Core market segment
c) Digby did not utilize enough long term funds to finance Don
d) It is not meeting key buying criteria on thrift market segment
e) a, b, c
f) c, d
g) b, c

16. What type of generic business strategy is Andrews using?
a) Cost leadership
b) Differentiation
c) Value chain analysis
d) Scenario analysis

17. What type of generic business strategy is Baldwin using?
a) Cost leadership
b) Differentiation
c) Value chain analysis
d) Scenario analysis

18. Why does Andrews have so much inventory?
a) Positioning coordinates are not close enough to ideal on Aft product
b) Forecast is too high on Elite product
c) Price is too high on Abby product
d) Age is too old on Agape product
e) All of the above
f) a, b, c
g) a, d
h) c, d

19. Which segment would a new firm be most likely to enter?
a) Nano

b) Elite
c) Thrift
d) Core
e) A case could be made for all
f) None

20. What firm has not properly financed its long term investments?
a) Andrews
b) Baldwin
c) Chester
d) Digby

Major Cases

Airbus A380 vs. Boeing 787

Competition between Airbus and Boeing has been characterized as a duopoly in the large jet airliner market since the 1990s. This resulted from a series of mergers within the global aerospace industry, with Airbus beginning as a European consortium while the American Boeing absorbed its former arch-rival, McDonnell Douglas in a 1997 merger. Other manufactures such as Lockheed Martin and Convair in the United States and British Aerospace, Dornier and Fokker in Europe, were no longer in a position to compete effectively and withdrew from this market. In the last ten years, Airbus has received 7,714 orders while delivering 4,503, and Boeing has received 7,312 orders while delivering 4,091.

Table 1
Aircraft in service by type (2013)

Date	**Aircraft in Operation**	
2007	**A380**	**Boeing 787**
2008	12	**-**
2009	10	-
2010	18	-
2011	26	3
2012	30	46
2013	22	54
Totals	**119**	**103**

Table 1 shows that Airbus has delivered 119 A380 aircraft while Boeing has delivered 103 Boeing 787 aircrafts.

Table 2
Comparison of Airbus A 380 and Boeing 787 (2013)

Factor	Airbus A 380	Boeing 787
Cost ($MM)	403	290
Size (Passengers)	525	330
Range (km)	15,700	12,964
Orders	259	1,012
Deliveries	119	103

The long range A380 has a price of $430 million while the mid to long-range Boeing 787 costs $290 million. The range of the A380 is 15,700 km while the range of the Boeing 787 is 12964 km. One reason that Airbus has more orders is because it began delivering the A380 in 2007. Boeing did not introduce the 787 until 2011.

Internal Analysis

In recent history, Boeing has shifted focus to their core competencies relating to wing technology, composites, and systems integration. As a result of this trend, there has been more reliance on the vast network of suppliers providing various assemblies to the Boeing assembly facilities in a just in time format (JIT). The outcome of this arrangement has allowed Boeing to share risks and focus their efforts with supplier relationships and marketing. (2010, 2011). A SWOT is provided for Boeing and Airbus in Tables 2 and 3.

Table 3 for SWOT Boeing

STRENGTHS	***WEAKNESSES***
Brand recognition & overall reputation Strategic alliances/networks for building and maintaining aircraft Lower cost alternative to the A-380 Most airports are not setup to accept an A-380, but they are for a 787 Minimal competition since barrier to entry for additional contenders is extremely high	Heavy reliance on suppliers Tarnished reputation due to delays in producing a finished product Market trends have reduced available capital spending on asset replacement Unsure of the 787's final profit margin Additional delays causing order cancellations are difficult to foresee
OPPORTUNITIES	***THREATS***
Most efficient transportation to date will provide buyers with greater revenue potential Air traffic growth trends in China (8.8% annual) and India (25% annual) favor the 787 over the A380 Boeing's position within the defense industry Marketing a fuel-efficient aircraft (787) during a period when countries need to reduce their dependence on foreign oil	Airbus continues to develop & sell directly competing products Technology used by Boeing suppliers in Japan could also be used by Airbus Potential foreign government contracts favoring Airbus because of their affiliations

Boeing has significant strengths. One is the wingspan of the 787. As shown in Exhibit 1, the wingspan of the 787 is 60 meters. The wingspan of the A380 is 79.8 meters. With a wingspan that large, many airports will not be able to accommodate the A380 without significant modifications of their runways and taxi lanes.

Boeing does have its weaknesses. One is the continued delays in producing the 787. In addition, Boeing is unclear as to what its final profit margins will be for the 787. With the delays, the number of orders for the aircraft is increasing. Boeing has only a small number of suppliers for parts: these suppliers could cause additional delays. The Boeing 787 Dreamliner was put into service in 2011.

From an opportunity perspective, Boeing has government contracts for its defense sector. In addition, the 787 is much more fuel efficient than the A380. The segments of growth will require mid to short haul rather than long haul (Exhibit 2).

Table 4 for SWOT Boeing

STRENGTHS	***WEAKNESSES***
Repeat customers due to brand recognition & overall reputation Large A-380 has no direct competitor with a comparable sized aircraft Extensive product lines provide revenue from various sources Minimal competition since barrier to entry for additional contenders is extremely high	Heavy reliance on foreign governments for funding and components Most airports are not setup to accept an A-380, but they are for a 787 Market trends have reduced available capital spending on asset replacement Profit margins have decreased as the company needs to produce more than 400 A-380s to break even
OPPORTUNITIES	***THREATS***
Potential foreign government contracts favoring Airbus because of their affiliations Take advantage of Boeing not having their 787 ready for mass production by selling Airbus alternatives	Boeing continues to develop & sell directly competing products Technology learned through subcontracting can be used by the Japanese, and other countries in alliance, to directly compete Tarnished reputation due to many delays in producing the A-380 and A-350

Airbus can gain exclusive contracts from governments of the European Union due to the ties Airbus already has with many of them. This could potentially be a significant growth opportunity for Airbus in the near future that Boeing may not have access to.

Even though there is no direct competition with the A-380, the margins may not be high enough to continue producing such an aircraft which ties up billions in cash.

Airbus' A380 has a competitor from Boeing: the 777. As stated earlier, Airbus is subsidized while Boeing is not. However, the 787 can provide competition for the A-380 and cost less to operate than the A380.

Airbus is heavily funded by the government. If this heavy funding were to be reduced or eliminated, Airbus may not be able to survive.

Airbus may have an advantage (outside) the U.S. because of the EU's government's relationships with other foreign governments. While these relationships are not focused solely upon aircraft manufacturing, they do not exclude aircraft manufacturing.

Airbus does not have an aircraft that can directly compete with the 787. If the future growth of aircraft is in short to medium haul (Exhibit 2) Airbus will not be able to effectively compete with newer aircraft for these markets. The aircraft (A350) that could be used to compete in this segment is not as fuel efficient as the 787. The A350 isn't expected to be completed until 2013.

Exhibit 1
Comparisons of 787 vs. A-3

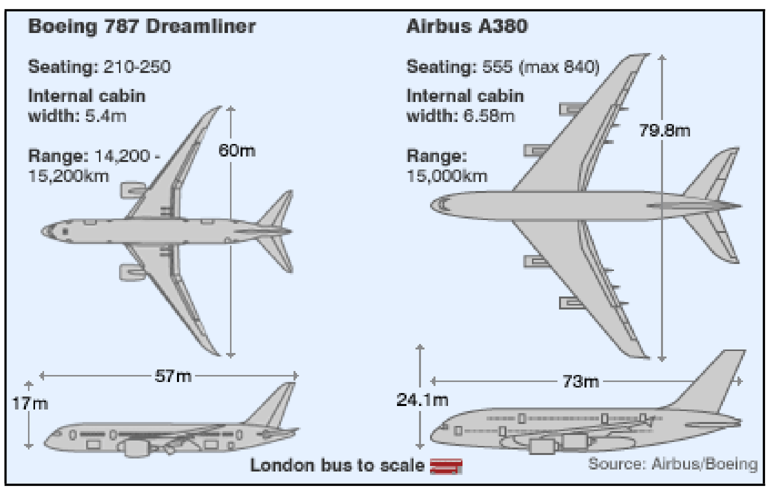
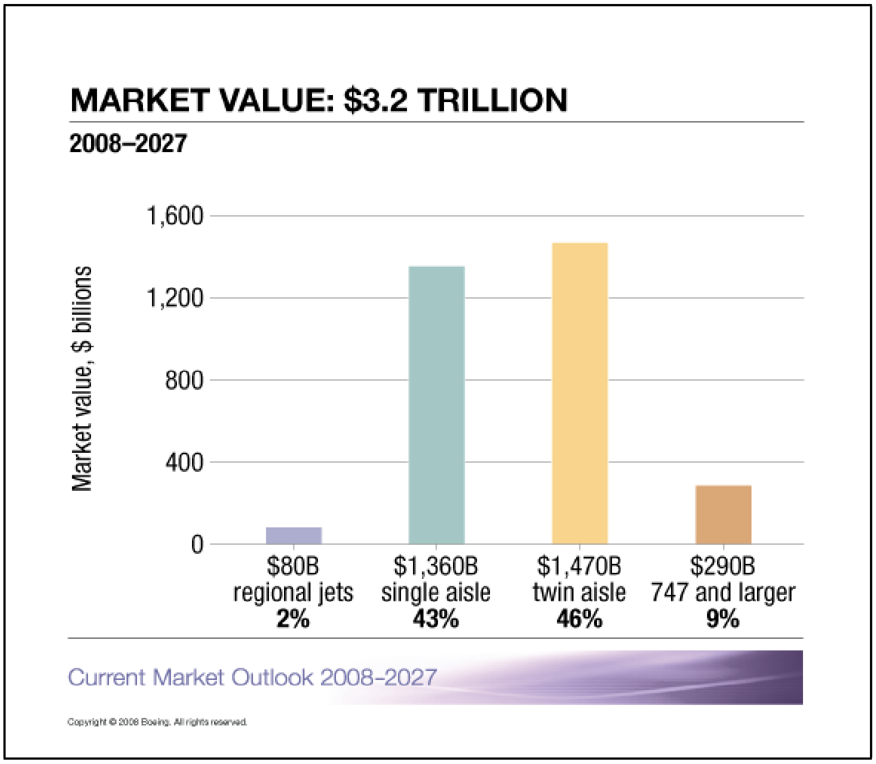


Exhibit 2
Commercial Airline Growth



From exhibit 2, if the long-range markets expand at a faster rate predicted than the 9% identified in Exhibit 2, Boeing is developing the 777X Aircraft for that market. The 777X is Boeings newest family of twin-isles airplanes that builds on the passenger-preferred and market-leading 777. Boeing Commercial Airplanes in November of 2013 launched the airplane at the Dubai Air Show with 259 commitments from four customers. Production of the 777X is scheduled to begin in 2017 and the first delivery is target at 2020. The 777X will be the largest and most efficient twin-engine debt in the world, with 12% lower fuel consumption and 10% lower operating costs than Airbus A380.

Table 4
Boeing Financial Results (in millions)

	2011	**2012**
Revenues	68.73	81.69
Net income	4.01	3.90
Earnings per share	5.33	5.11
Operating cash flow	2,952	5,603

Table 5
Airbus Financial Results (in millions)

	2011	**2012**
Revenues	49.13	56.48
Net income (loss)	1.03	1.22
Earnings per share	1.27	1.50
Operating cash flow	.25	3.47

It can be seen from table 4 and 5, both firms were profitable in 2011 and 2012. As can be seen from Table 3 and 4, both Boeing and Airbus have grown from a revenue and a net income perspective in 2011 and 2012.

Amazon.com

The Japanese bookselling industry is a lucrative market with annual sales approaching $10 billion. Competition in wholesale book distribution is minimal with two companies, Nippon Shupppan Hanbai and Toah, traditionally controlling between 70% and 90% of the wholesale book market. However, the opposite has been true in the retail market where rivalry is historically characterized by large numbers of relatively small booksellers.

The reason for this lack of an industry leader in the retail market is due to legislation that has been in place since 1980, which has restricted new entrants into the industry and prevented any retailer from gaining a competitive advantage. Despite the barriers, Amazon has found success and subsequently revolutionized the Japanese bookselling industry.

In the United States, Amazon is widely regarded as the premier marketplace for the frugal shopper. Amazon has the ability to offer products at a discounted rate of 20%-30% below their competitor's prices in the United States. The convenience of online shopping combined with competitive shipping rates and the ability to provide products ranging from books to groceries provides an advantage of competitors.

Amazon has several unique resources and capabilities that distinguish them from the competition. The most vital asset Amazon has is the IT infrastructure it possesses. It can be utilized in any country where Amazon has a presence without much change from region to region. This asset has allowed Amazon to partner with numerous traditional businesses and has become a resource for these companies that do not have a large online presence. Companies such as Toys 'R' US and Borders are utilizing Amazon's vast e-market capabilities and infrastructure for their online sales which enables them to focus more eternal resources on in-store sales. The online infrastructure adds further value to the company by dramatically decreasing cost associated with traditional brick and mortar stores.

Another resource that Amazon has successfully capitalized on is the logistical branch of their business. Amazon has built fulfillment centers around the world. This investment has enabled Amazon to provide lower shipping costs and the ability to ship items at a much faster rate than its competitors. In the U.S. Amazon has also recently signed an agreement with USPS to begin making delivers on Sundays, expanding their delivery capabilities. Amazon has past the savings along to customers by offering the Amazon Prime subscription. Prime members have the luxury of free two-day shipping, including Sundays, and it only costs the members $79 dollars. In Japan a system was created that allowed the customer to earn points based on the price of purchases and the points would be redeemed for gift certificates to use on future purchases. This was another way for Amazon to offer "discounts" to their customers without local regulation without being in violation of local regulations. Amazon has proven to be a resourceful and flexible multi-national entity which is undoubtedly why they find themselves amongst the elite global online retailers.

These capabilities along with the ease of use enable Amazon to stay in the top 100 and continue to capitalize on their business model and customer differences. Amazon success relies heavily on their ability to offer the lowest prices for their products. In service.

After reporting a 30% year-over-year percentage growth for North American sales in 2012 and 23% for international sales, it is safe to say that Amazon is firmly holding their own in the e-commerce marketplace in the United States.

Amazon's American business model was initially a dismal failure in Japan. What worked in the United States nearly foundered in Japan because of cultural and legislative Japan this is a problem because discounting prices is not allowed. In 1958 the Japanese government enacted the Saihanbai Kakaku Iji Seido which translates to resale price maintenance system. In Japan it has been shortened to Saihan Seido or simply Saihan System. The Saihan System was put in place for six categories of copyrighted material: CDs, records, cassettes, books, magazines, and newspapers. Owners of copyrighted material are allowed to set the minimum retail price of their products. Retailers are then forced to sell the owners material at the price which eliminates the possibility of discounting. The governments reasoning for this system is to reduce price competition between retailers which, in theory, increases stability and competitiveness.

As of September 2013, Amazon is the largest bookseller in Japan in all markets, capturing 40% of the e-reader market and over 20% of the conventional publishing market. This success is a direct result of Amazon capitalizing on their resources and capabilities while adapting to overcome institutional barriers.

As stated above, in the United States, Amazon's competitive advantage resides with capability to offer the lowest price. The Saihan System initially prevented Amazon from gaining this advantage in Japan. Another issue Amazon encountered was the Japanese publics' fear of fraud. Customers were hesitant to use credit cards to make online purchases.

Amazon success in the Japanese bookselling industry is largely a result of their ability to adapt their established U.S. business model to suit the Japanese market. Amazon realized that adaptations were the key to their strategy to enter the Japanese market.

Archer Daniels Midland (ADM)

In the 2011 letter to shareholders CEO Pat Woertz, established four objectives for ADM to accomplish. The following are the objectives and progress accomplished in 2012:

1. Improving portfolio management and capital allocation to achieve better returns: In 2012, we removed several underperforming assets that did not meet our objectives for both profits and returns. Our investments –both acquisitions and capital expenditures--- are made in regions where demand from crops and protein is growing. We are expanding our crop sourcing, processing at export capacity in key supply regions—including South America, Eastern Europe and the United States—as we build our destination business in Asia and the Middle East. In the largely mature North American and Western European markets, we are optimizing existing assets in balancing output to meet market needs. These actions reflect enhanced discipline in capital-allocation to improve overall returns on capital.
2. Reducing overhead costs: ADM is completing a workforce reduction, lowering energy costs, reducing contractor expense and streamlining work processes. These efforts will drive more than 150 million in annual run-rate savings by March 2013.
3. Strengthening our balance sheet: With elevated working capital requirements due to high crop prices ADM has bolstered our liquidity position and worked to free up cash to meet the flexibility needed to capitalize on emerging growth opportunities.
4. Returning nearly 1 billion dollars to shareholders: in 2012, share repurchases totals 527 million. In November, ADM increased our quarterly dividend from 16 to 17.5 per share, and during the fourth quarter, we issued our 323rd consecutive quarterly payment—a record of 80 years of uninterrupted dividends.

Agricultural Processing Industry

The agricultural processing industry can be segmented into 4 primary segments: Oilseed Processing, Agricultural Services, Corn Processing, and Other. The Other segment is composed primarily of food and feed ingredients. Table 1 shows the position of ADM business segments within the agricultural processing industry life cycle.

Oilseed Processing

The Oilseeds Processing segment is a mature segment within the agricultural processing industry. The Oilseeds Processing segment includes activities related to processing oilseeds such as soybeans, cottonseed, sunflower seeds, canola, peanuts, and flaxseed. These are made into vegetable oils and meals for the food and feed industries.

In addition, oilseeds may be resold into the marketplace as a raw material for other processors. Crude vegetable oil is sold "as is" or is further processed by refining, bleaching, and deodorizing into salad oils. Salad oils can be further processed by hydrogenating into margarine, shortening, and other food products. Partially refined oil is sold for use in chemicals, paints, and other industrial products. Oilseed meals are primary ingredients used in the manufacture of commercial livestock and poultry feeds.

Table 2 shows the sales and profit by segment for ADM's business segments. The Oilseed Processing segment represents approximately 33 percent of ADM's sales and 38 percent of its profits. This segment is a price-sensitive market.

Table 1
Agricultural Processing Industry Life Cycle & ADM Business Segments

	Stage of Industry Life Cycle			
ADM Business Segments	**Introduction**	**Growth**	**Maturity**	**Decline**
Oilseed Processing			*	
Agricultural Services			*	
Corn Processing				
-Sweeteners & Starches		*		
-Bioproducts	*			
Other				
-Food & Feed Ingredients		*		
-Financial			*	

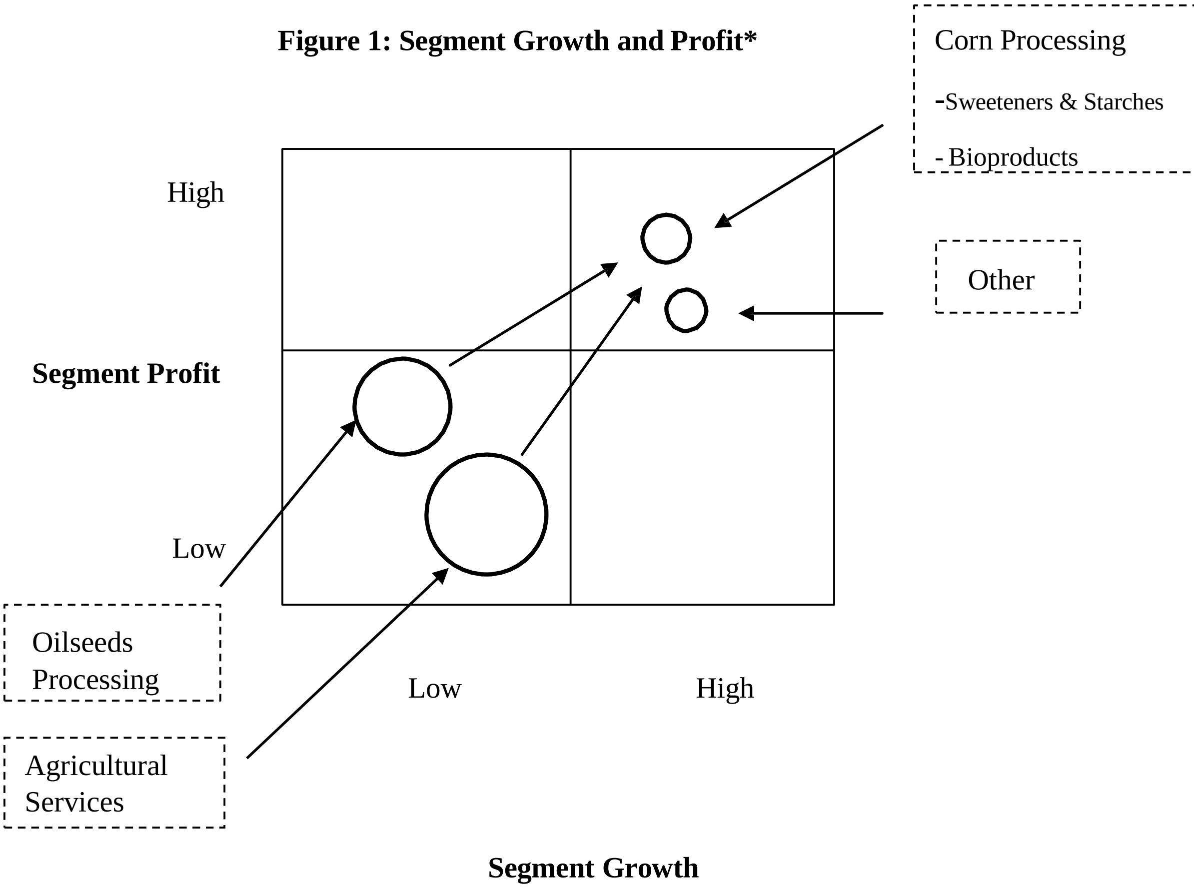
Table 2
ADM's Primary Business Segments (2012)

Business Segment	Net Sales	Operating Profits	Percent of Sales	Percent of Operating Profit
Oilseeds	$26,662	$1,524	33	38
Corn Processing	$9,908	$1,062	12	26
Agricultural Services	$37,927	922	47	23
Other	$6,179	513	8	13
TOTAL	**$80,676**	**$4,021**	**100**	**100**

Oilseed Processing

As shown in Figure 1, the Oilseeds Processing segment is a cash cow for ADM. This segment generates significant cash to fund ADM's growth business segments. In 2011, ADM's Oilseed Processing experienced some growth. Even with the European crisis, processing results improved principally due to strong demand. This strong demand in Europe came from increased European vegetable oil demand and resulted in improved oilseeds processing financial results. North American processing results improved principally due to increased demand for soybean meal.

Figure 1: Segment Growth and Profit*



***NOTE**: Circle size refers to ADM's revenue per business segment

Agricultural Services

The Agricultural Services segment utilizes the company's extensive grain elevator and transportation network to buy, store, clean, and transport agricultural commodities, such as oilseeds, corn, wheat, oats, and barley. It then resells these commodities primarily as feed ingredients and as raw materials for the agricultural industry.

Agricultural Services' grain sourcing and transportation network provides reliable and efficient services to the company's agricultural operations.

This is another segment of the agricultural processing industry which generates a great deal of cash (Figure 1) to support ADM's growth segments. In addition, this is ADM's largest segment from a revenue perspective. This segment accounts for 47 percent of the sales and 23 percent of the profits. From an industry perspective, the Oilseeds and Agricultural Services represent maturity business segments (Table 1).

Agricultural products are now being used to satisfy more needs than ever before. One reason is because the need for quality foods is increasing as the population increases.

Enhanced nutrition is demanded by health conscious people throughout Europe and North America. As a result, nutritional feed ingredients for livestock are used more today than ever before.

Corn Processing

The Corn Processing segment includes activities related to the production of sweeteners, starches, dextrose, and syrups for the food and beverage industry. It also includes activities related to the production and fermentation of bioproducts such as alcohol, amino acids, and other specialty food and feed ingredients.

Corn processing consists of harvesting raw grains, corn, soybeans, wheat, cocoa, sunflower seeds, canola, peanuts and flaxseed. These are then processed and delivered to customers around the world as products such as protein meals, oils, sweeteners, ethanol, biodiesel, and flour. These products are growing in demand because of the increasing buying power of the world's middle class as we exit the global recession.

The Corn Processing segment consists of primarily two divisions: (1) sweeteners and starches, and (2) bioproducts. It is in the bioproducts segment that ADM is focusing the bulk of its growth. The production of ethanol is one principle aspect of bioproducts. As alternative sources of fuel continue to be in large demand, ADM may invest significant resources within this business segment.

Other Segment

The Other segment consists of primarily food and feed ingredients. This segment represents 8 percent of revenue and 13 percent of the profit. The products produced by corn, agricultural, and other oilseed processors require global distribution and transportation networks. Processors must develop a dependable network to procure a steady supply of raw materials into their plants. They must have the means to store grains and seeds until they can be processed and they must have a transportation system that is flexible enough to meet market conditions. It is not enough that grain processors be competent at the procuring, transporting, storing and processing of grain; these firms must also be good at merchandising their product.

Financial Position of Competitors

Competitors within this industry offer products that have little differentiation from their competitors. Therefore, products are primarily bought because of their competitive price levels. Commodity type producers can control their selling price only to the extent that they can control their costs.

ADM, Cargill, Bunge Ltd., and ConAgra Foods Inc. are four companies that control the majority of the agricultural processing industry. All have established substantial market share within the industry and they are positioned to take advantage of the industry's future growth. Cargill is a privately owned business. ADM is the largest of the publicly held company with 2011 revenue of over $80 billion.

ADM's Financial Position

ADM is the worldwide market leader in oilseed processing and corn processing. ADM is also a leader in the US market for the production of ethanol. ADM has seen significant growth both in revenue and profit in the last five years.

ADM set an earnings record of over $80 billion in sales and over $4 billion in operating income. Most of the corn processing is done domestically and is much more profitable than the oilseed processing or agricultural services. ADM is focusing upon using free cash flow from the corn processing division to strengthen its international position. ADM is focusing upon supplying India, China and the Commonwealth of Independent States with protein products.

Transportation and distribution consists of a large portion of cost of goods sold for the agricultural processing business. ADM's investment in transportation and distribution has proven to be an effective way of managing costs. This network has contributed to efficiencies that add both flexibility and cost control.

ADM's success has come about by concentrating on the strengths of the company and the ever-changing opportunities created by market forces. Distribution, transportation, its financial position, global positioning, and renewable fuels are strengths of ADM.

ADM believes that it must provide answers to four major questions if it is to grow:

1. Should ADM expand its carbon sequestration site?
2. Should ADM continue to maintain its close one-on-one relationship with farmers?
3. Should ADM increase its R & D budget?
4. What type of generic business level strategy should ADM pursue?

BNSF Railroad

Macro-Environmental Overview

Several economic factors have a significant impact upon the North American railway industry. Demand for energy (electricity) to provide light for our homes and offices and provide for infrastructure will continue to rise with population. As the demand for energy increases and regulation pushes the world towards cleaner methods of producing electricity, the railroads may be well positioned to provide low emission coal to its customers. If oil reserves are taped, the railroads will be able to provide emission efficient transportation. As regulators, consumers and the world push towards better emissions standards, the transportation of food, oil, coal, construction products, and consumer goods provide a significant opportunity for railroads.

In addition, international markets will require additional power for electricity. As globalization increases, the United States must be well developed to compete in the world marketplace. Global demand for agricultural products is continuing to increase; China, the world's largest emerging market, is becoming a large importer of agricultural commodities.

Industry Overview

Historically, the railroad industry has been derived demand market (demand for the railroads is determined through the goods that the railroads ship) meaning that the growth of railroad traffic has signaled the overall "health" of the U.S. economy.

In many cases, the economic status of the U.S.'s railroad system often proves to be an excellent national financial indicator. Based upon an analysis of the railroad industry in 2011 by Zacks Equity Research, the railroad industry is expected to improve substantially following the recession. Zacks cited an improving U.S. economy and a surge in automobile shipments as being the drivers behind the growth of the railroads. In 2010, all of the major freight railroads reported positive results in terms of volume transported. Forecasted demand for industrial products like iron ore, rolled steel, metal scraps, oil and natural gas accessories (pipe), sand, and various types of clay are expected to increase.

The U.S. rail carriers transport 40 percent of the nation's goods, in terms of distance and weight. The U. S. Department of Transportation projects that demand for rail freight transportation, measured in tonnage, will increase 88 percent by 2035. This represents significant growth potential for railroads.

Company Profile

BNSF was created on September 22, 1995, with a merger of two railroads: Burlington Northern and Santa Fe Pacific. On February 12, 2010 BNSF was acquired by Berkshire Hathaway, Inc. Warren Buffett is the CEO of Berkshire Hathaway.

Berkshire Hathaway Inc. (Berkshire) is a holding company owning subsidiaries engaged in a number of business activities. The most important of these are insurance businesses conducted on both a primary basis and a reinsurance basis. Berkshire also owns and operates a number of other businesses engaged in a variety of activities. Berkshire's insurance and reinsurance business activities are conducted through over 60 domestic and foreign-based insurance entities. Geico accounts for about one-fourth of Berkshire's business. Berkshire's other businesses range from Dairy Queen to Clayton Homes to See's Candies. It also controls MidAmerica Energy, a collection of electrical utilities, and Marmon Group, a manufacturing conglomerate. Berkshire's investment portfolio includes sizable stakes in Coca-Cola, Wells Fargo and Proctor & Gamble. Berkshire Hathaway holdings consist of Commercial Casualty Insurance Company and International American Group, Inc. BNSF is a totally different business. BNSF is a railroad involved in the distribution and handling of agricultural products, coal, consumer, and industrial products that directly impact millions of citizens every day.

In February 2010, Berkshire announced the acquisition of the Burlington Northern Santa (BNSF) and made BNSF a subsidiary of Berkshire. This was Berkshire Hathaway's largest acquisition ever. As Buffett stated, "It's an all in bet on the economy of the U.S."

The North American rail industry consists of 7 primary railroads. BNSF is the second largest rail company in North America, with 32,000 route miles in 28 states and 2 Canadian provinces. BNSF employs 38,000 workers and has access to over 40 ports. BNSF has 32 intermodal facilities that allow the company to haul both rail and truck freight. BNSF railroad reported revenues in its 2010 annual report of $14,835 billion.

Two major railroads, the Union Pacific and BNSF provide rail service west of the Mississippi River. Two other major railroads, CSX and Norfolk Southern (NS) provide service east of the Mississippi River. The Kansas City Southern Railway provides service from Kansas City south along the Mississippi River to New Orleans and into Mexico. The Canadian Pacific (CP) and Canadian National (CN) provide service throughout Canada and some cities (e.g. Seattle) throughout the northern U.S.

Acquisition of BNSF

Prior to the acquisition of BNSF, Buffett owned stocks worth $141 million in Norfolk Southern and $277 million in Union Pacific. Buffett already owned 22 percent of BNSF before the acquisition. Buffett paid $34 billion to acquire BNSF. This was a 31 percent premium. In addition, Buffett also acquired $10 billion of BNSF's debt.

Berkshire Hathaway Inc. acquired BNSF for several reasons. The **first** of which was, in Buffett's words, he "liked to acquire firms which he believes are undervalued." The reason he feels that BNSF was undervalued is the potential for growth in the transportation industry due to growth in the nation's and world's population. Rail moves 42% of America's inter-city freight, measured by ton-miles, and BNSF moves more than any other railroad – about 28% of the industry total.

The **second** reason Buffett acquired BNSF was to hedge on the volatility of his portfolio. He believes that there will continually be a need to transport goods, coal, consumer goods, and/or food products. Buffett chose rail given its capability as an economical mode of transportation. Tied into the need to transport commodities and the potential for growth is BNSF's access to America's largest reserve of low sulfur coal in the Powder River Basin in Wyoming and Montana. BNSF's presence as a carrier of coal from the Powder River Basin is vital to electric companies across the nation.

The Powder River basin contains coal that is 60% cleaner than coal sourced in other parts of the U.S. As world demand for energy continues to increase and pollution becomes a greater concern in developing nations, this access will increase the need for transportation of low-sulfur based coal. Businesses that rely on coal will look for clean alternatives when producing power, and generating heat. BNSF can capitalize on this opportunity as demand for cleaner energy increases. Although renewable energy is the "buzz word" in today's market place, we are far from removing our dependence on coal. As such, nations will utilize carbon resources, and the cleaner the carbon resources, the higher the demand.

The **third** reason Buffett acquired BNSF is because railroads are vital to the U.S. economy because of the amount of retail and manufactured goods they haul across the country. "They do it in a cost-effective way and extraordinarily environmentally friendly way," stated Buffett.

A **fourth** reason Buffett acquired BNSF is because railroads are much more energy-efficient than trucks because they use much less fuel. An average Burlington Northern train hauls as much freight as 280 trucks. Railroads are also favored by some shippers because they can carry products (e.g., hazardous chemicals) that can't travel on highways.

Exhibit 1 (measured in billions of dollars) shows the merchandise trade by region for 2008, 2009, and 2010. Growth was minimal in many global markets. This is due, in large part, to falling prices of oil and other primary commodities. The recession caused households and firms to reduce their spending on all types of goods. The reduction in demand for these products fed through to markets that supply inputs for their production. All of these products are very important to railways, every item imported or exported must be transported at some point along the domestic distribution channel to get to the point of consumption.

Exhibit 1 shows trade for global markets in 2010. The only significant increases in GDP for 2010 were China and India: China's GDP increased by 10.3 percent from

2009 to 2010. India's GDP increased by 9.7 from 2009 to 2010. In addition, markets in Asia led in terms of exporting. Asia's overall exports increased by 23.1 percent. China, India, and Japan posted significant increases. It may be the case that the Asian markets are recovering quicker from the global recession than other markets. For example, the European Union (E.U.) had a GDP increase of only 1.8 percent in 2010.

Exhibit 1: GDP and merchandise trade by region, 2007-2010 Annual % change									
	GDP			**Exports**			**Imports**		
	2008	**2009**	**2010**	**2008**	**2009**	**2010**	**2008**	**2009**	**2010**
World	1.4	-2.4	3.6	2.2	-12.0	14.5	2.2	-12.8	13.5
North America	0.1	-2.8	3.0	2.1	-14.8	15.0	-2.4	-16.7	15.7
United States	0.0	-2.6	2.8	5.8	-14.0	15.4	-3.7	-16.4	14.8
South and Central America	5.1	-0.2	5.8	0.8	-7.9	6.2	13.2	-16.3	22.7
Europe	0.5	-4.0	1.9	0.2	-14.1	10.8	-0.6	-14.2	9.4
European Union (27)	0.5	-4.2	**1.8**	0.0	-14.5	11.4	-0.9	-14.2	9.2
Commonwealth of Independent States (CIS)	5.5	-7.1	4.3	2.0	-5.2	10.1	16.4	-25.6	20.6
Africa	4.8	2.1	4.7	1.2	-4.2	6.5	14.6	-5.0	7.0
Middle East	5.3	0.8	3.8	3.5	-4.3	9.5	14.2	-7.8	7.5
Asia	2.8	-0.2	6.3	5.5	-11.2	**23.1**	4.7	-7.5	17.6
China	9.6	9.1	**10.3**	8.5	-10.5	28.4	3.8	2.9	22.1
Japan	-1.2	-6.3	3.9	2.2	-24.8	27.5	-1.0	-12.2	10.0
India	6.4	5.76	**9.7**	14.4	-6.8	19.9	17.3	-1.0	11.2
Newly industrialized economies	1.9	-0.8	7.7	4.9	-5.7	21.3	3.5	-11.4	18.0
Developed economies	0.2	-3.7	2.6	0.8	-15.1	12.9	-1.2	-14.4	10.7
Developing and CIS	5.7	2.1	7.0	4.2	-7.8	16.7	8.5	-10.2	17.9

The major exception to the below average GDP growth in Europe was Germany, whose 3.6% growth rate outpaced all euro area economies and all European Union (27) members except for Sweden and Poland.

Table 1 shows the financial condition of BNSF for the two years (2008, 2009) before the acquisition (predecessor years - 2008, 2009) and the year (2010) during which the acquisition occurred. Revenue for 2010 is greater than revenues for 2009 but less than 2008. Net income from the February 31 – December 31, 2010 time period is significantly higher than net income of 2009 and about the same as 2008 (Table 1).

Table 1

BNSF Railway Company and Subsidiaries

Consolidated Statements of Income

In millions

	Successor	Predecessor		
	February 13 – December 31, 2010	January 1 – February 12, 2010	Year ended December 31, 2009	Year ended December 31, 2008
Revenues	$ 14,835	$ 1,768	$ 13,848	$ 17,787
Operating expenses:				
Compensation and benefits	3,544	439	3,458	3,859
Fuel	2,687	329	2,372	4,640
Purchased services	1,787	211	1,859	2,074
Depreciation and amortization	1,531	192	1,534	1,395
Equipment rents	670	97	777	901
Materials and other	652	1	640	1,022
Total operating expenses	10,871	1,269	10,640	13,891
Operating income	3,964	499	3,208	3,896
Interest expense	72	16	124	97
Interest income, related parties	(15)	(1)	(3)	(19)
Other expense, net	8	2	6	18
Income before income taxes	3,899	482	3,081	3,800
Income tax expense	1,517	200	1,067	1,438
Net income	$ 2,382	$ 282	$ 2,014	$ 2,362

Several publications view Buffett's acquisition of BNSF Railroad as "a $34 billion bet on the U.S. economic future." He thinks railroads are a key economic indicator because of the amount of retail and manufactured goods they haul across the country. "They do it in a cost-effective way and extraordinary environmentally friendly way," he told CNBC. "I basically believe this country will prosper and you'll have more people moving more goods 10 and 20 and 30 years from now, and the rails should benefit."

Table 2

Freight Hauled by BNSF

Product Category	Percent Revenue 2010	Percent Change from 2009
Consumer Products	30	+16.6
Coal	27	+22.0
Industrial Products	23	+20.4
Agricultural Products	20	+23.3

From Table 2, BNSF had significant increases in these business segments in 2010 when compared to 2009 revenues. Most of the freight which BNSF hauls (and other large railroads) are commodities: coal, agricultural products, and industrial products. However, a significant portion (30%) of the goods that BNSF hauls are consumer products.

As Table 2 shows, BNSF hauls consumer products, coal, industrial products, and agricultural products. Thirty percent of what BNSF hauls is consumer products. The acquisition of BNSF provides a network to move Bershire Hathaway's consumer products from Chicago and St. Louis to major markets west of the Mississippi. These consumer products account for 30 percent of its total revenue (Table 2).

Its next largest segment was coal, at 27 percent of revenue. Berkshire owns major utilities that rely on coal through its MidAmerican Energy Holdings Co. Industrial products – like farm equipment, lumber and chemicals – at 21 percent. The agricultural products segment – 20 percent of its total revenue – includes major crops like corn, wheat and soybeans – much of that exported to China. Burlington Northern serves more of the nation's major grain-producing regions than any other railroad.

From a rail perspective, the products that Berkshire Hathaway moves have had significant growth from 2009 to 2010 (Table 2). Railroads are much more energy-efficient than trucks because they use much less fuel. An average Burlington Northern train hauls as much freight as 280 trucks. Rails are also favored by some shippers because they can carry things that can't travel on highways, like hazardous chemicals.

Buffett said the BNSF deal is essentially a wager on the U.S. economy because railroad profits tend to grow along with the economy. Railroads carry raw materials and finished products for a number of industries as well as delivering coal to utilities. Buffett has said he realized a few years late that railroads were an "appealing investment." As diesel fuel prices rise, shipping by rail instead of truck becomes more attractive, and it would be extremely difficult for a competitor to build a new railroad.

Many analysts believe that Burlington Northern has been more progressive than its peers in developing new technology, making it more profitable. Major railroads have been able to slash costs during the recession by cutting jobs, parking railcars, improving train speeds and other moves that improved efficiency.

BNSF has some unique capabilities that other major railroads do not have. The following are some of these capabilities:

- Hauls more than 10% of the coal that is used to generate electricity in the U.S.
- Transports enough grain to supply 900 million people with a year's supply of bread.
- Transports more intermodal (use of more than one mode of transportation for a single shipment) traffic than any other rail system in the world; the equivalent of loading a truck trailer or container on a BNSF train every 6 seconds
- A new car or truck is loaded onto a BNSF automobile train approximately every 21 seconds.
- Handles enough coiled sheet steel to lay the unrolled coils end to end 12 times between New York, NY and Seattle, WA.
- Transports enough lumber each year to build more than 500,000 homes.

With China growing its GDP by 10.3 percent in 2010 compared to 2009, exports are growing by 28 percent and imports are growing at 22 percent (Table 1). BNSF's ports along the western coast of the United States are a significant benefit to BNSF over most other major railroads.

Chevron

Chevron Corporation and its subsidiaries and affiliates and provides administrative, financial, management and technology support to the United States and international subsidiaries that engage in fully integrative petroleum operations, chemic operations, mining activities, power generation and energy services. Upstream operations consist primarily of exploring for, developing and producing crude oil and natural gas; processing, transportation and regasification associated with liquefied natural gas; transporting crude oil by international oil export pipelines; transporting, storage and marketing of natural gas, and a gas-to-liquids project. Downstream operations consist primarily of refining crude oil into petroleum products; transporting crude oil and refined products by pipeline, marine vessel, motor equipment and railcar, and manufacturing and marketing of commodity of petrochemicals, plastics for industrial uses and fuel and lubricant additives.

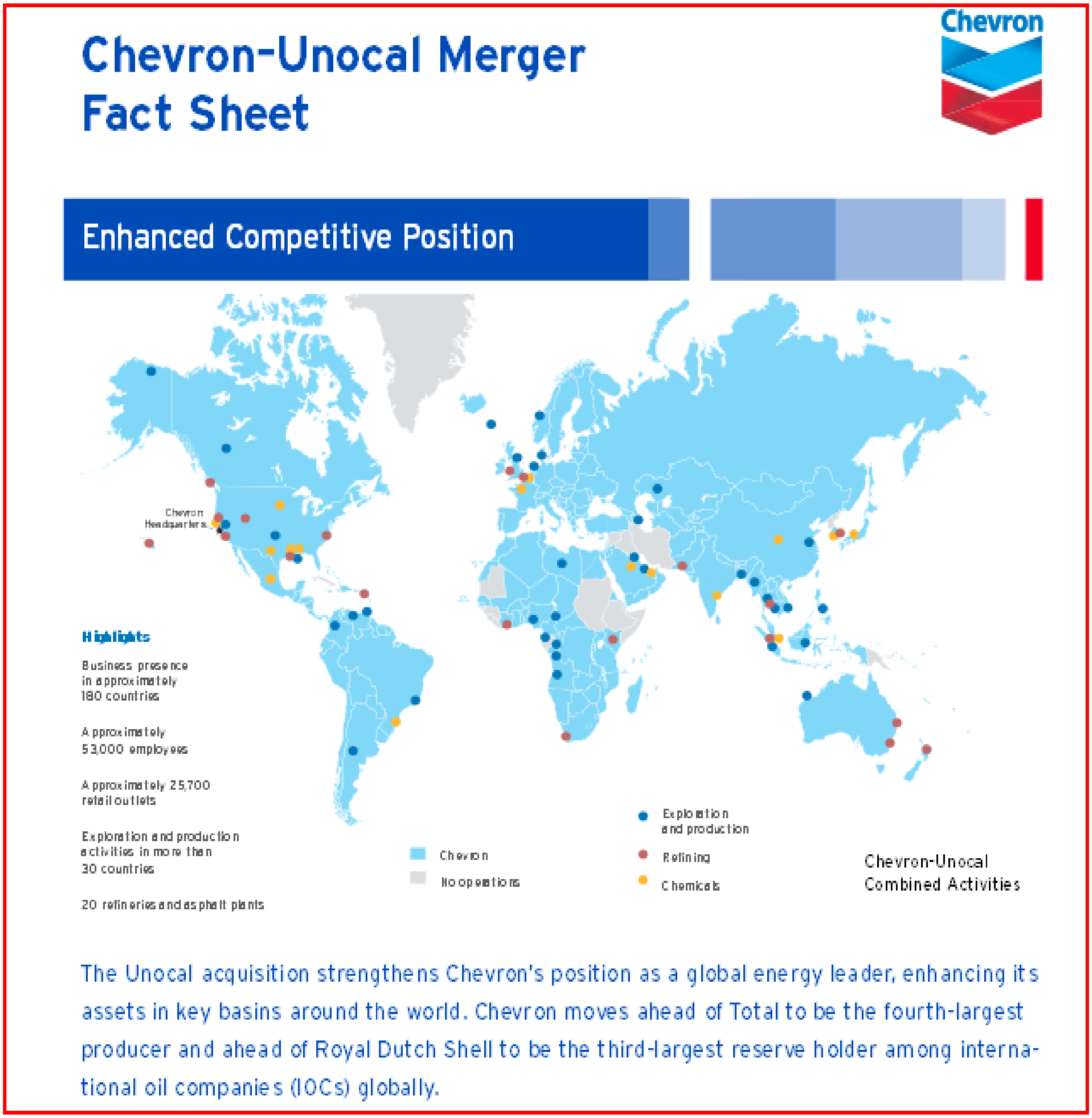
From the CEO 2012 letter to share holders, "Chevron is one of the world's leading integrated energy companies and conducts business worldwide." Chevron has grown throughout the years despite economic and political obstacles.

Chevron's growth has primarily been built through strategic alliances and acquisitions. Their acquisition of Gulf Oil Corporation in 1984 almost doubled their crude oil and natural gas reserves worldwide. Another major merger in Chevron's history was between Texaco and Chevron in 2001. "The merger joined two leading energy companies and long-time partners to create a U.S.-based, global enterprise that is highly competitive across all energy sectors. According to Chevron's CEO letter to the shareholders in 2002, ChevronTexaco will have world-class upstream positions in reserves, production and exploration opportunities; an integrated, worldwide refining and marketing business; a global chemicals business; significant growth platforms in natural gas and power; and industry leading skills in technology innovation."

Figure 1 shows Chevron's global position.

Figure 1

Chevron's Global Positon

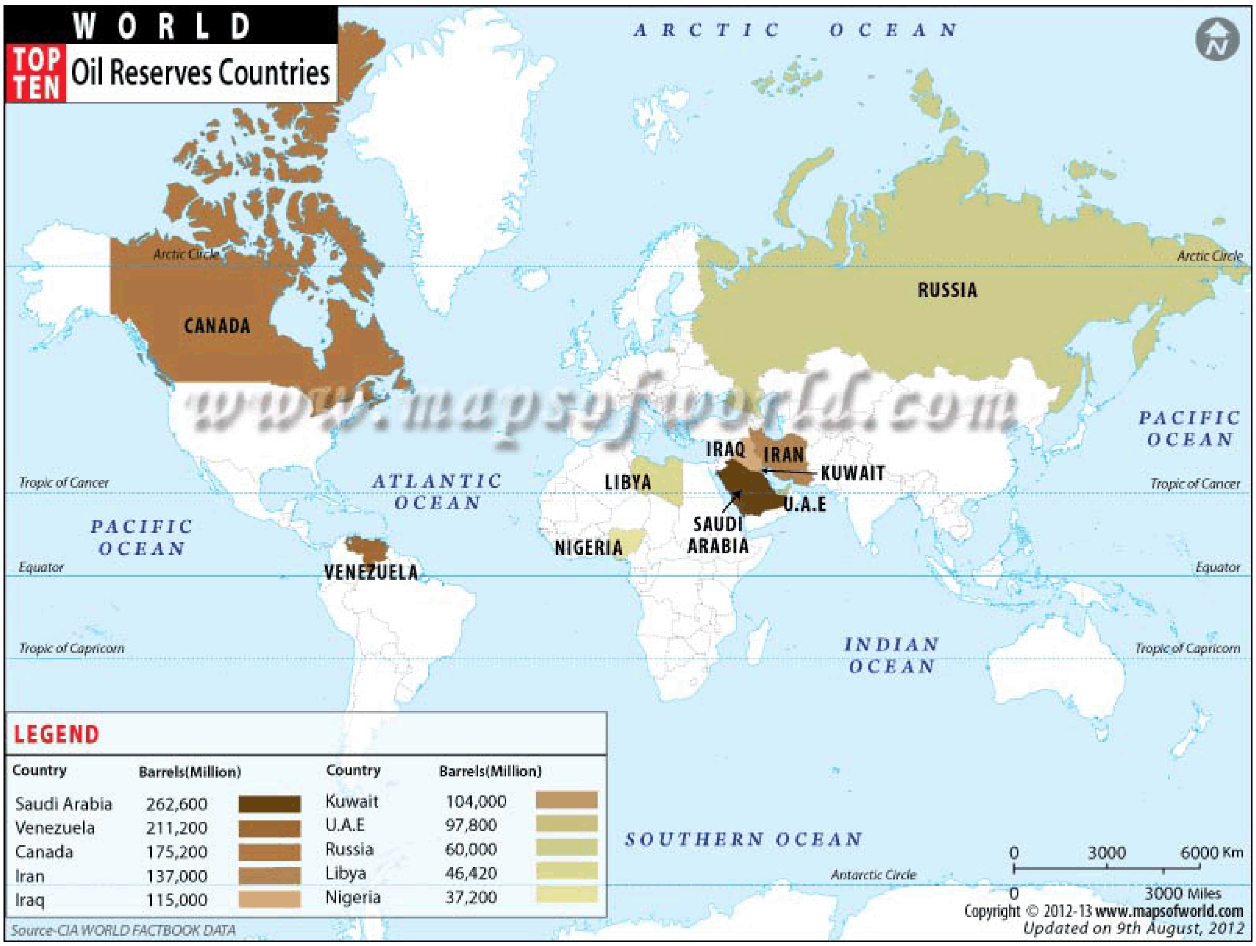


http://www.chevron.com/documents/pdf/merger_fact_sheet.pdf

Figure 2 shows the world's top 10 oil producing countries

Figure 2

Top 10 World Producing Countries



http://www.mapsofworld.com/world-top-ten/world-top-ten-oil-reserves-countries-map.html

Chevron currently has a joint venture with Tengizchevroil in Kazakhstan and strategic alliances in Nigeria, Venezuela and countless other countries. Strategic alliances and joint ventures have been very beneficial for Chevron and are the primary way that they have gained global access to large oil reserves and gas fields. Venezuela, one of the leading countries in the world in oil reserves, is a very important market for Chevron to.

Chevron is currently partnering with Petróleos de Venezuela, S.A. (PDVSA), the leading oil company in Venezuela, and owns substantial interests in various subsidiaries. Subject to negotiation with PDVSA, it should consider increasing its interest in these subsidiaries due to the huge amount of oil extraction possible in Venezuela. In addition, the fact that Venezuelan President Chavez is no longer in power may cause Venezuela to be more open to furthering its relationship with the United States. The political environment may help Chevron to increase its exposure in Venezuela. Below are the current subsidiaries of Chevron in Venezuela. (Chevron Venezuela 2012)

- Petroboscan: Chevron hold a 39.2 % interest (Daily production: 103,000 barrels and 14 million cubic feet of natural gas)
- Petroindependiente: Chevron holds a 25.2 % interest (Daily production: 4,000 barrels of liquids and 44 million cubic feet of natural gas)
- Petropiar: Chevron holds a 30 % interest (Daily production: 152,000 barrels of synthetic oil and 61 million cubic feet of natural gas)
- Block 2 (Venezuela offshore project): Chevron holds a 60 % interest

These are very important for Chevron due to the fact that Venezuela is one of the very richest oil countries in the world. It is very important for Chevron to engage in these alliances due to the capital intensive development of gas fields. It is more feasible for several companies to join together in drilling for oil to spread the risk over several companies should the oil well go dry etc. The joint venture involving Chevron Phillips Chemical Company in 2000 was created to achieve economies of scale thus making Chevron Phillips a major supplier in the petrochemical and plastics market.

Chevron is a global company with 75 percent of their oil production occurring outside the U.S. Additionally, Chevron has invested in 13 power-generating facilities within the U.S. and Asia. Chevron is looking to technology to continue to support their growth in developing and producing crude oil. Developing emerging energy technologies is a focus of Chevron for the future to help find better ways to expand their renewable energy resources and make non-food-based biofuels.

Possible Future Strategic Alliances and Acquisitions

As of August of 2012, Chevron is considering a joint venture with Yacimientos Petrolíferos Fiscales **(**YPF), an Argentine state controlled oil company. Argentina contains the third largest source of unconventional oil in the world, so this could be a valuable venture for Chevron. The CEO of YPF, Miguel Galuccio, is eager to enter an alliance with Chevron due to their superior potential to develop and extract Argentina's oil reserves. It takes a global corporation such as Chevron to have the funds, technology, and manpower to extract and refine the large quantity of oil efficiently. Consequently, Chevron has an eager potential subsidiary. Chevron believe that this would be a great strategic alliance for Chevron to enter into due to the high profit potential, the large volume of oil to be extracted, and the willingness of Argentina to let Chevron subsidize its oil company, YPF.

Chevron’s financial indicators are identified in Table 1.

Table 1

Chevron’s Financial Highlights

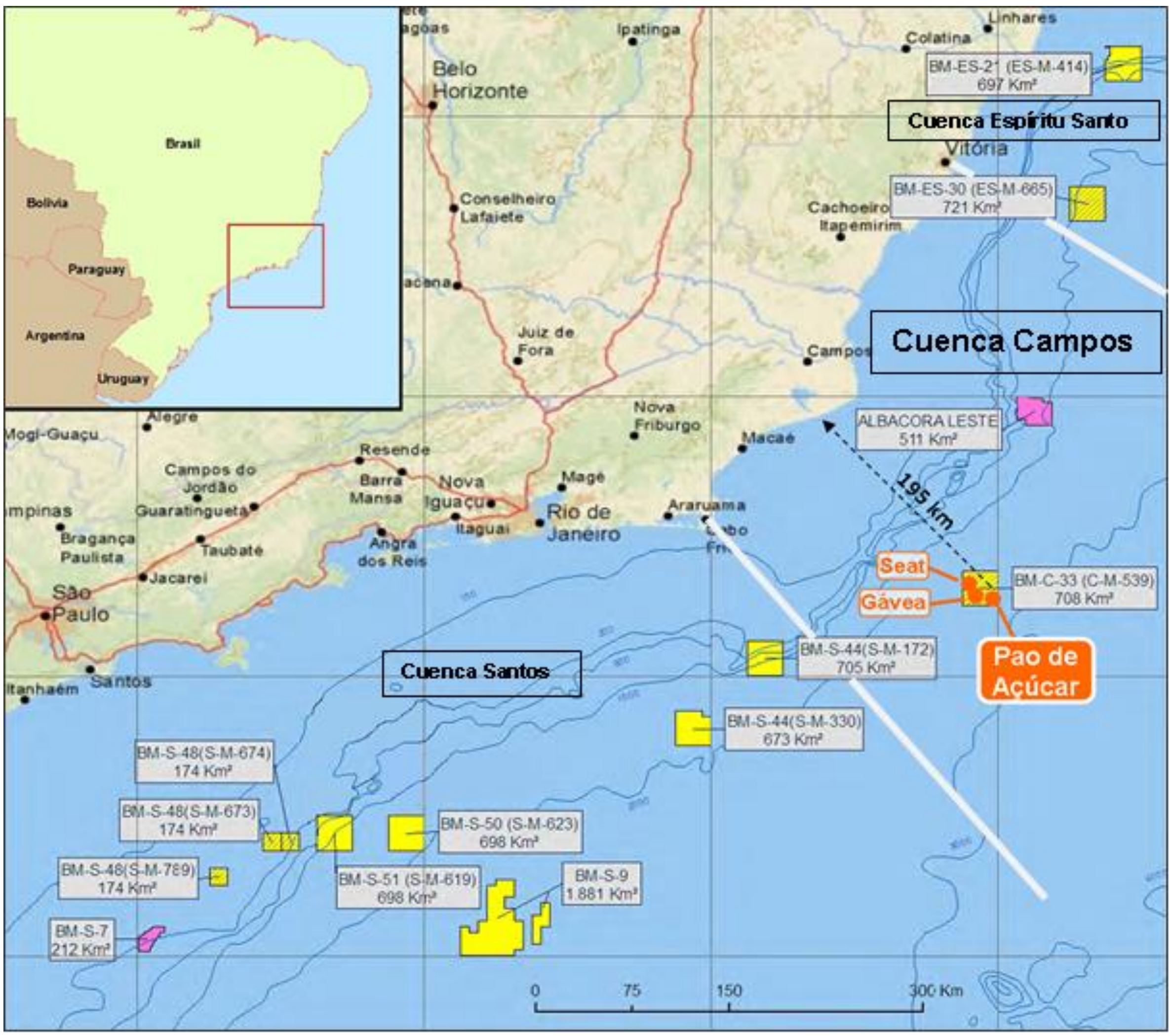
	Year		
Millions of dollars, except per-share amounts	2012 ($)	2011 ($)	% change
Net income attributable to Chevron Corporation	26.179	26.895	(2.7)
Sales and other operating revenues	230.590	244.371	(5.6)
Capital and exploratory expenditures	34229	29066	17.8
Value of Total assets at year-end	232.982	209.474	11.2
	136524	121382	12.5
Per-share data	13.32	13.44	(.9)

Another strategic alliance that Chevron is currently pursuing Tullow Oil, an independent oil company based in London that operates in a total of twenty five countries, including several in Africa, and also the Atlantic Basin. One of these countries, Ghana, has one of the world’s largest untapped oil reserves. Several of the less developed countries of Africa such as Ghana have excellent oil reserves that often have not been tapped due to technological difficulties and lack of funds, however, Tullow is increasing its efficiency and capacity to extract this African oil. Jubilee Field, in Ghana contains an estimated 1.8 billion barrels of crude oil to be extracted, and Tullow was able to extract 66,000 barrels of oil daily in 2011. Chevron could benefit from forming a strategic alliance with Tullow due to the large potential for oil exploration and extraction. In addition, Tullow could likely benefit from Chevron’s superior technology and funds to enhance oil exploration and extraction in these areas.

In addition to Africa, another possible expansion location is the emerging energy market of Brazil. Brazil contains highly productive off shore oil fields including Santos and Campos Basins. Chevron can capitalize on these locations due to their competitive strength in off shore extraction. The Santos and Campos basins are located in the southeastern border of Brazil (Figure 2).

Figure 2

Brazil's Oil Positions



In 2014, Chevron has budgeted $36.7 billion for expansion. The funds will be divided among the following business segments:

Chevron's Business and Segment Strategy	Budget Initiative
Upstream and gas	Exploration and production strategy: grow profitably in core areas and build new legacy positions Gas and midstream strategy: commercialize our equity gas resource base while growing a high-impact global gas business
Downstream and chemicals	Strategy: improve returns and grow earnings across the value chain
Technology	Strategy: differentiate performance through technology
Renewable energy and energy efficiency	Strategy: invest in profitable renewable energy and energy efficiency solutions

In December 2013, Chevron will join forces on shale gas exploration in south-eastern Poland with local state-controlled gas firm PGNiG to lower costs and speed up the work of the region.

The agreement is the first example of cooperation between a Polish firm and a foreign investor in the shale gas sector, move keenly awaited by international players.

Aligning with firms in Poland is important because local firms would contribute access to exploration licenses and can help smooth relations with Polish authorities.

"The initiative is part of PGNiG's new policy of openness to opportunities that might come from working with other companies interested in Polish shale gas deposits," PGNiG said in a statement.

The companies said that if the cooperation is successful, they may set up a joint company in which both will hold a 50 percent stakes. A joint venture would bring together four licenses in south-eastern Poland: two from PGNiG, and two from Chevron.

Disney

The Walt Disney Company, together with its subsidiaries, is a diversified worldwide entertainment company with operations in five business segments: Media Networks, Parks and Resorts, Studio Entertainment, Consumer Products and Interactive. On May 7, 2014, the company acquired Maker Studios, Inc. (Marker), a leading network of online video content.

The Media Networks segment includes broadcast and cable television networks, television production operations, television distribution, domestic television stations and radio networks and stations.

With respect to the Parks and Resorts segment, the company owns and operates the Walt Disney Resort & Spa in Hawaii, the Disney Vacation Club, the Disney Cruise Line and Adventures by Disney. The company manages and has effective ownership interests as of September 27, 2014 of 51% in Disneyland Paris, 48% in Hong Kong Disneyland Resort and 43% in Shanghai Disney Resort, each of which is consolidated in their financial statements. The company also licenses the operations of the Tokyo Disney Resort in Japan. The company's Walt Disney Imagineering unit designs and develops new theme park concepts and attractions as well as resort properties.

The businesses in the Studio Entertainment segment generate revenue from the distribution of films in the theatrical, home entertainment and television markets, the distribution of recorded music, stage play ticket sales and licensing revenues from live entertainment events. Significate operating expenses include film cost amortization, which consists of production cost and participations and residuals expense amortization, distribution expenses and costs of sales.

The Consumer Products segment engages with licensees, publishers and retailers throughout the world to design, develop, publish, promote and sell a wide variety of products based on the company's intellectual property through its Merchandise Licensing, Publishing and Retail businesses. In addition to supporting the company's film and television properties, Consumer Products also develops its own intellectual property, which can be used across the company's businesses.

The interactive segment creates and delivers branded entertainment and lifestyle content across interactive media platforms. Interactive's primary operations include the production and global distribution of multi-platform games, the licensing of content for games and mobile devices, website management and design for other company businesses and the development of branded online services.

Table 1 **Financial Data**			
Year	**2014**	**2013**	**2012**
Statements of Income ($ millions)			
Revenues	$48,813	$45,041	$42,278
Net Income	$8,004	$6,636	$6,173
Net Income Attributable to Disney Per Common Share	$7,501	$6,136	$5,682
Earnings Attributable to Disney			
Diluted	$4.26	$3.38	$3.13
Basic	$4.31	$3.42	$3.17
Dividends	$0.86	$0.75	$0.60
Balance Sheets ($ millions)			
Total Assets	$84,186	$81,241	$74,898
Long-Term Obligations	$18,618	$17,337	$17,876
Disney Shareholders' Equity	$44,958	$45,429	$39,759

Table 1 shows Disney's financial data from 2012 to 2014.

Table 2 Revenue and Operating Expenses				
Year		2014	2013	2012
Segment	**Percent of Revenue (2014)**			
Revenues ($ millions)				
Media Networks	43	$21,152	$20,356	$19,436
Parks and Resorts	31	$15,099	$14,087	$12,920
Studio Entertainment	15	$7,278	$5,979	$5,825
Consumer Products	8	$3,985	$3,555	$3,252
Interactive	3	$1,299	$1,064	$845
Total Consolidated Revenues	100	$48,813	$45,041	$42,278
Segment Operating Income ($ millions)				
Media Networks	57	$7,321	$6,818	$6,619
Parks and Resorts	20	$2,663	$2,220	$1,902
Studio Entertainment	12	$1,549	$661	$772
Consumer Products	10	$1,356	$1,112	$937
Interactive	1	$116	($87)	($216)
Total Segment Operating Income	100	$13,005	$10,724	$9,964

Table 2 shows Disney's revenue and operating income by segment.

G.M.

G.M. had been reducing its workforce by thousands of employees for many years. This action did not appear to be effective. As stated in the chapter, G.M. lost $82 billion between 2004-2008. Once G.M. was in Chapter 11 bankruptcy protection, a different approach was taken. G.M. reviewed its product lines. Table 1 shows the lines which were eliminated and those which were kept.

The Chevrolet, GMC, Cadillac, and Buick lines had been profitable and were retained. G.M. eliminated the Pontiac line and attempted to sell off the Saturn, Hummer, and Saab lines. The Pontiac line had been unprofitable for many years and was discontinued in 2009. The Saturn, Hummer, and Saab lines had become unprofitable.

Table 1: The Transformation of G.M.

Surviving Brands	2009 Sales Forecast (Units)		Brands Eliminated	2009 Sales Forecast (Units)
Chevrolet	1,084,534		Pontiac	143,691
GMC	206,887		Saturn	73,171
Cadillac	92,427		Hummer	12,012
Buick	87,579		Saab	9,308

China's Sichuan Tengzhong Heavy Industrial Machinery Co. was to acquire Hummer for approximately $500 million. The bid was withdrawn on 2/24/10. G.M. discontinued this line on that date. Saab was to be acquired by a Swedish consortium led by Koenig Segg Automotive Ab for approximately $600 million. This bid was also withdrawn. G.M. then entered into an agreement with Spyker Cars N.V. in 2011. This arrangement was not positive for either firm. G.M. discontinued the line in 2011. A group led by Roger Penske will acquire Saturn brand. The Pontiac brand was eliminated in 2010 and all 21,000 workers who produce these cars were to be eliminated. Due to the reduction in brands, G.M. eliminated 1,100 dealerships.

One incentive that has been put forward by the U.S. government was to make $24 billion in funding available for the creation of battery generated cars. G.M. is one of the firms who have submitted proposals for this initiative. Researchers at Alliance Bernstein have forecasted that this method of propulsion could reach $150 billion by 2030.

G.M. is expected to produce a number of new products such as a compact Chevrolet, a smaller Buick, a battery powered Chevy Volt, and a similar Cadillac model.

G.M.'s exit from bankruptcy protection hinged upon a federal judge's willingness to approve the sale of G.M. to the U.S. Treasury. On July 7, 2009, the bankruptcy judge ruled G.M. could sell the bulk of its assets. This sale allows G.M. to leave behind many of its cost and liabilities. On July 10, 2009, G.M. exited Chapter 11 bankruptcy protection.

This approach to focusing upon only profitable brands appears to be working. In 2010, G.M. had revenues of $135 billion and net income of $4.67 billion.

Table 2 shows that revenue has been relatively flat while net income has gone from $9.19 billion in 2011 to $3.94 billion in 2014.

Table 2 G.M.'s Recent Performance				
Year	2011	2012	2013	2014
Revenue ($ billions)	148.86	150.29	152.09	151.09
Net Income ($ billions)	9.19	6.18	5.34	3.94

Table 3 shows G.M.'s sales by brand.

Table 3 Sales by Brand (2013)		
Brand	**Revenue (Units)**	**Percent Change from 2013**
Chevrolet	4,984,126	0
Opel/Vauxhall	1,063,979	0
Buick	1,032,331	15
Cadillac	250,830	28
All Others	3,383,386	10
Total	9,714,652	53

Table 4 shows G.M.'s top countries for sales of all brands.

Table 4 Sales by Country (2013)		
Rank	**Country**	**Revenue (Units)**
1	China	3,160,374
2	U.S.A.	2,786,078
3	Brazil	649,849
4	U.K.	300,977
5	Russia	257,583

G.M.'s product mix has changed significantly since its split from Chapter 13 bankruptcy protection.

Table 5 shows G.M.'s current (2013) product mix.

Table 5 G.M.'s 2013 Product Mix	
Brand	**Location of Primary Manufacturing**
Chevy	U.S.
Buick	U.S.
G.M.C.	U.S.
Cadillac	U.S.
Opel	Germany
Vauxhall	U.K.
Holden	Australia
Autobaojum	China
Wuling	China
Faw Jigfang	China

China is G.M.'s largest consumer market. However, China is a very competitive market.

Table 6 shows G.M.'s sales in China by brand.

Table 6 G.M. Sales in China		
Brand	**2013 Sales**	**Percentage Change**
Wuling	1,484,422	11.2
Buick	809,918	15.7
Chevy	652,077	8.5
Baojum	100,498	19.0
Cadillac	50,055	66.6

Global Steel Industry

Steel is a vital part of modern life. It builds the infrastructure of the modern world. Almost everything that is required to make an economy more productive depends on steel – machine tools, transport infrastructure, the equipment of civilization. Steel helps meet people's demands for higher living standards. It is also essential for carbon-free energy production applications. What people sometimes forget is that steel is also the most recyclable material in the world, making it much more environmentally friendly than people often realize.

Steel is used in almost every industrial process, whether or not it forms part of the finished product. In most of these processes there is no substitute for it. It remains a critical material for building the infrastructure of the modern world. Today's leading producers continue to create new varieties of steel for new applications, and work to refine the manufacturing process in order to reduce energy consumption and CO_2 emissions.

Table 1 World Steel top producers 2012			
Rank	**Member Company**	**MNT***	**Headquarters**
1	Arcelor Mittal	93.6	Luxembourg
2	Nippon Steel & Sumitomo Metal	47.9	Japan
3	Hebei Iron and Steel	42.8	China
4	Bao Steel Group	42.7	China
5	POSCO	39.9	South Korea
6	Wuhan Iron and Steel	36.4	China
7	Jiangsu Shagang	32.3	China
8	Shougang	31.4	China
9	JFE	30.4	Japan
10	Ansteel	30.2	China
11	Shandong Iron and Steel Group	23.0	China
11	Tata Steel	23.0	India
13	United States Steel Corporation	21.4	United States
14	Nucor Corporation	20.1	United States
15	Gerdau	19.8	Brazil

*In millions of metric tons

Table 1 shows the largest steel producer in the world. Arcelor Mittal is the largest steel producer in the world. It produces 93.6 million metric tons compared to the second largest steel producer, Nippon Steel, which produces 47.9 million metric tons (Table 1). Arcelor Mittal's global dominance is shown in Figure 1.

Figure 1

Arcelor's Global Presence (Part 1)

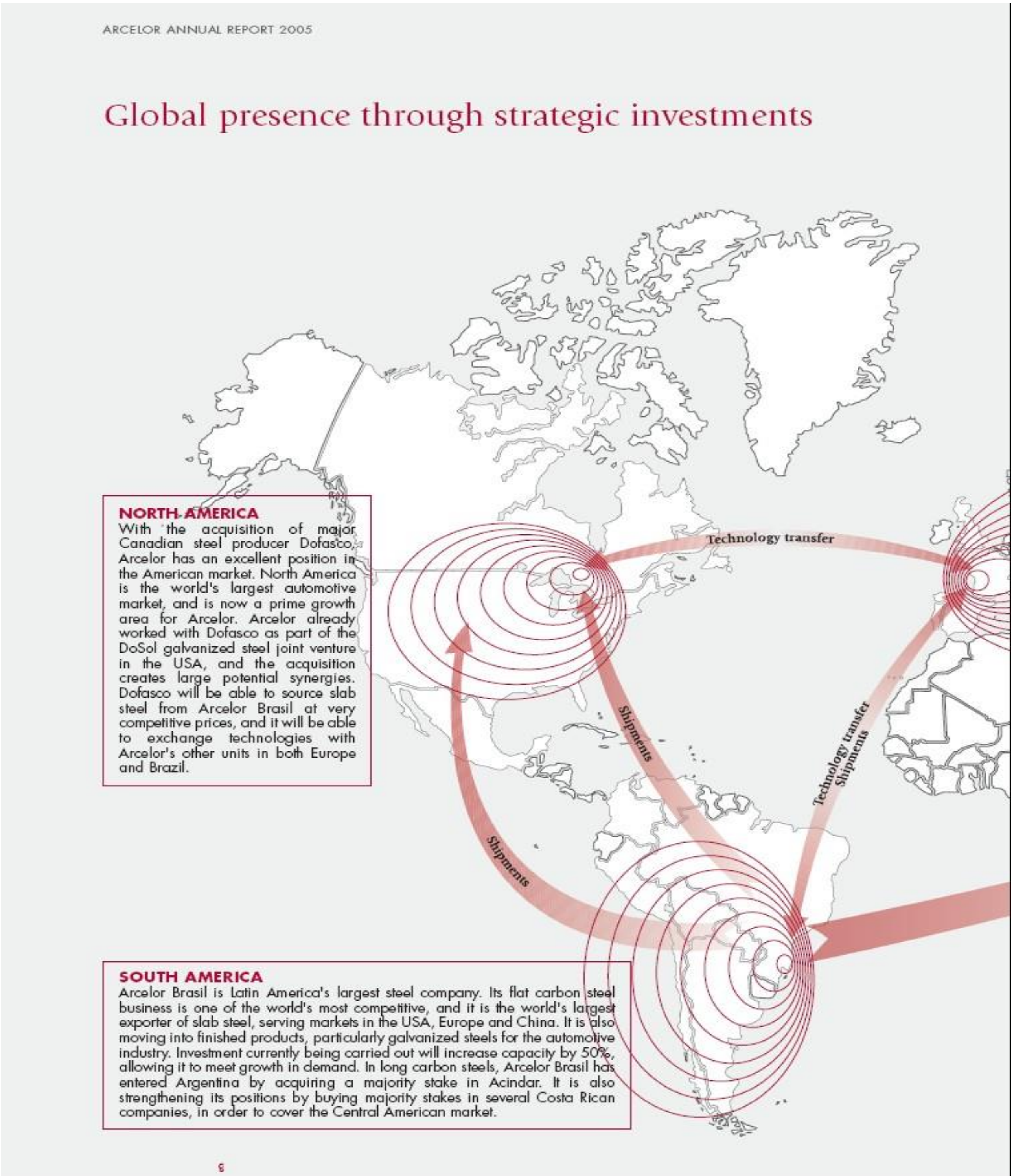
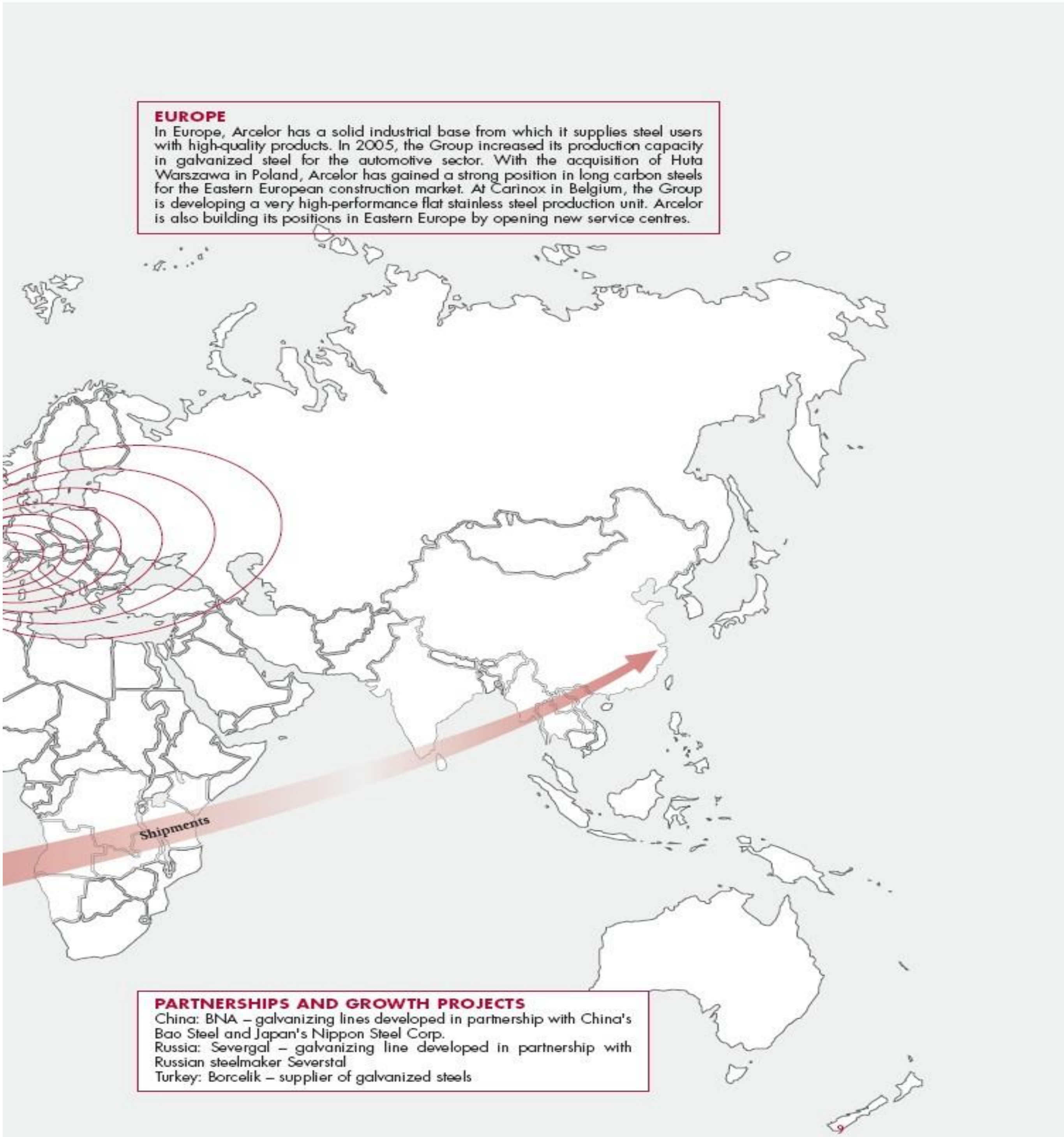


Figure 1

Arcelor's Global Presence (Part 2)



Mergers and acquisitions in the steel industry are becoming common as companies are realizing that they must be major international players to survive in the global steel marketplace. The merger between Arcelor and Mittal is a milestone in the consolidation of the global steel industry. It creates a company which is capable of three times the capacity of its nearest rival, Bao Steel. With 320,000 employees and an estimated $70 billion in revenue, the Arcelor Mittal will be the first steel maker with more than 100 metric tons of annual capacity. This capacity is enough to provide twice as many automobiles as the world makes every year.

Table 3
Arcelor Mittal Financial Data

	2012	2011	2010
Revenue (billion $)	84.21	93.97	78.02
Net income (billion $)	3.84	2.25	1.93
EPS ($)	1.55	1.54	1.93

Like many other firms in the steel industry, the global recession significantly negatively affected many of Arcelor Mittal's positions. Since Arcelor Mittal has significant positions in most major markets, the financial impact was very significant. They were negatively affected from a truly global perspective. However, in more recent years (2011, 2012) revenue and net income have begun to increase (Table 3).

Arcelor Mittal has an established presence in South America, Canada, Western Europe, CIS, Russia, the Middle East, Africa, Asia, and Australia. It has a presence in the United States but it would like to expand further into the United States. Table 4 shows the distribution of Arcelor Mittal's sales.

Table 4

Destination Sales (Arcelor Mittal)

	Non-current Assets	
Americas	As of December 31, 2011	As of December 31, 2012
Brazil	7,763	7,775
United States	6,243	5,934
Canada	5,463	6,517
Mexico	1,456	1,469
Argentina	329	267
Trinidad and Tobago	290	251
Others	232	243
Total Americas	21,776	22,456
Europe		
France	5,962	5,801
Luxembourg	2,225	1,686
Belgium	3,380	3,306
Spain	3,530	3,265
Ukraine	4,450	4,182
Poland	2,651	2,635
Germany	3,258	3,301
Czech Republic	849	816
Romania	846	818
Italy	278	263
Bosnia and Herzegovina	255	256
Other	737	761
Total Europe	28,421	27,090
Asia and Africa		
South Africa	2,054	1,910
Kazakhstan	1,948	2,056
Liberia	828	1,040
Morocco	263	189
Others	543	510
Total Asia and Africa	5,636	5,705
Unallocated Assets	30,442	27,528
Total	86,275	82,779

The United States is one of the major steel consumption countries in the world. With the exception of Nucor Steel and U.S. Steel, no other top producer has a significant position within the U.S. Nucor will be discussed first.

Table 5 **Nucor Steel Financial**			
	2012	2011	2010
Revenue (billion $)	19.43	20.02	15.84
Net income (billion $)	.50	.78	.20
EPS ($)	1.14	1.49	.42

Table 5 shows that Nucor Steel has experienced profitable growth from 2010 to 2012.

Nucor is the world's foremost steel recycler, and one of the largest recyclers of any kind. Nucor's philosophy was to get big by thinking small. Most of America's steel manufacturers required huge integrated steel mills; however, Nucor pioneered new ways with electric furnaces and mini-mills.

By using scrap as their primary feedstock, Nucor has become the leading U.S. producer of structural steel, steel bars, steel reinforcing bars, steel joists, and girders and steel decks. Also they are a major producer of steel in sheet and plate form; cold finished steel; steel fasteners; metal building systems; light gauge steel framing; rebar fabrication; and the largest U.S. scrap processor.

Nucor has distinguished itself from the rest of industry by using scrap steel. Furthermore, the company uses modern steel making techniques, which allows Nucor to employ fewer workers. The workers at Nucor are all independent of unions and have vested interest in the productivity of the company because a large portion of their compensation is based on their own productivity.

Nucor currently has a four step strategy in place in order to amplify growth and increase profitability. The first part of the strategy is to optimize existing operations. Currently, only 82% of Nucor's manufacturing plants are being utilized. The extra production potential could lead to larger profits by means of economies of scale. Second, Nucor plans to pursue acquisitions because it does not have a global presence. Nucor has all but one plant within the United States. The third aspect of this strategy is to continue growth through the development of new technologies. Fourth, Nucor hopes to grow globally through joint ventures. U.S. Steel will now be discussed.

Table 6
U.S. Steel Financial Data

	2012	2011	2010
Revenue (billion $)	19.33	19.88	17.37
Net income (billion $)	1.24	(.53)	(.42)
EPS ($)	(3.35)	(.37)	(.86)

As shown in Table 6, U.S. steel has strongly rebounded in terms of total revenue and net income from 2010-2012. EPS has been decreasing significantly from 2010 to 2012 (Table 6). U.S. Steel is the largest steel manufacturing firm in the U.S., and the eighth largest globally. U.S. Steel has made some investments in 2009 which, coupled with the global recession, have produced negative net income and negative earnings per share from 2010 to 2012.

Louis Vuitton Moet Hennessey

From Louis Vuitton Moet Hennessy (LVMH) 2012 Chairman's letter to shareholders:

"LVMH exhibited excellent performance in 2012 and continues to expand market share in a mixed international environment. Our brands are strong, our teams are committed and react fast, with an obsession for quality, creativity, and excellence. This is what is driving the Group forward at every level and has sustained our business at a time of economic uncertainty in Europe and a temporary period of slow growth in Asia."

Further, the Chairman states that LVMH believes that its competitive advantage comes from the following: "In 2012, we continued to recruit and train craftspeople in pursuit of excellence, develop our array of skills, innovate, enhance the quality and appeal of our stores and increase our market share. Confident in its competitive edge, LVMH blends modernity with tradition, creative flair with quality, and power with agility to develop our stable of brands, build tomorrow's growth drivers and ensure our long-term success."

LVMH Moet Hennessy Louis Vuitton is the world's largest luxury goods company, with brands that are bywords for the good life and everything showy. LVMH makes wines and spirits (Dom Pérignon, Moet & Chandon, Veuv Clicquot, and Hennessy), perfumes (Christian Dior, Guerlain, and Givenchy), cosmetics (Bliss, Fresh, and BeneFit), fashion and leather goods (Donna Karan, Givenchy, Kenzo, and Luis Vuitton), and watches and jewelry (TAG Heure, Ebel, Chaumet, and Fred). LVMH's retail division includes Sephora cosmetics stores, Le Bon Marché Paris department stores, and 61% of duty-free retailer DFS Group. Chairman Bernard Arnault and his family, through Groupe Arnault, own about 47% of LVMH.

Moet Hennessy had been formed through the 1971 merger of Moet and Chandon (the world's #1 champagne maker) and the Hennessy Cognac company (founded by Irish mercenary Richard Hennessy in 1765). Moet Hennessy acquired rights to Christian Dior fragrances in 1971.

LVMH increased its fashion holdings with the purchases of the Givenchy Couture Group (1988), Christian Lacroix (1993), and Kenzo (1993). The company also acquired 55% of French media firm Desfosses International (1993), Celine fashions (1996), the Chateau d'Yquem winery (1996), and duty-free retailer DFS Group (1996). LVMH bought perfume chains Sephora (1997) and Marie-Jeanne Godard (1998). In 1998 LVMH acquired the Paris department store Bon Marche.

In early 2000 LVMH bought Miami Cruiseline Services, which operates duty-free shops of cruise ships, auction house L'Etude Tajan, and 67% of Italian fashion house Emilio Pucci. The company later purchased 35% of French video game retailer Micromania and 51% of department store Samaritaine. In late 2000 LVMH acquired Gabrielle Studio, which owns all Donna Karan licenses. In 2001 the company bought Donna Karan Interantional.

In 2001, LVMH bought the Newton and MountAdam vineyards for about $45 million. It then began marketing DeBeers diamond jewelry in a 50-50 joint venture.

LVMH opened its biggest store—a four-story emporium on New York's Fifth Avenue—in February 2004. A few months later, the company added whisky-maker Glenmorangie PLC. LVMH made its debut in the South African market in October 2004, opening its first sub-Subharan boutique in Johannesburg.

In late 2005 LVMH opened its largest store to date on the Champs-Elysees in Paris and the DeBeers brand was introduced in the US with stores in New York and Los Angeles. Also that year, LVMH was the winning bidder for whisky maker Glenmorangie PLC, for which it paid £300 million. LVMH is a major player in the luxury products industry.

The luxury products industry generates roughly $80 billion each year. Luxury products are considered jewelry, watches, leather goods, wines and champagne, fragrances, and apparel. Louis Vuitton Moet Hennessy (LVMH) is involved in creating all of these products. For the most part, the industry focuses on the elite population of consumers which have a sizable disposable income. The major players in the industry include: LVMH, Gucci, Richemont, Bulgari, and Hermes. All of the firms compete in multiple industry lines and multiple geographic markets. LVMH competes in five segments of the luxury industry. Fashion and leather is the first segment that will be discussed

In 2012 the fashion and leather segment accounted for 35 percent of the revenue and 55 percent of the profit (Table 1) of LVMH's total revenue. Two activities fueled the growth in this segment: the opening of the "Maison" on the Champs-Elysées in Paris, and the launch of Louis Vuitton's first sunglass collection. With a strong performance in North America, continual steady growth in Europe, accelerated sales in Japan, and increases in sales in Asia (particularly in the Chinese market), LVMH continues to gain global market share in this segment.

Wine and spirits is a second LVMH segment from a 2012 profit perspective. LVMH is clearly the world leader in the wine and spirits business segment. This segment accounted for 15percent of the revenue and 21 percent of the profit in 2012 (Table 1). Hennessy holds 40% of the cognac market and between 20%-25% of the overall champagne market. In the premium champagne segment, LVMH has a dominant share of 50%, which is built around exclusive brands such as Moet Chandon and Veuve Clicquot. LVMH has also ventured outside the traditional wine belts in France and Italy to acquire high-end producers in Napa Valley, California, and Australia.

In the third segment, selective retailing accounts for 28 percent of the revenues and 13 percent of the operative profit (Table 1). Selective retailing benefited from the rapid evolution of the Chinese market.

LVMH increased the size of its retail network to 345 stores of which 26 became "global concept stores." Each of these stores is between 400-1000 square meters of retail space. LVMH has expanded its online product offerings by launching e-luxury.com.

Sephora, a perfume sold in selective retail locations, continued to grow around the world. Sephora has achieved double-digit revenue growth on a year to year basis. Sephora increased market share in Europe and North America and established a presence in Asia. This product became the only player in the perfume selective retailing segment to operate profitability on three continents. The launch of Sephora.fr online was accomplished in June 2005.

A fourth segment in which LVMH competes is perfumes and cosmetics. This segment accounts for 13 percent of the revenue and 7 percent of the operating profit. This gain outpaced the competition and was attributed to the success of Christian Dior's perfume gaining market share in Europe and Asia.

Christian Dior sales increased around the world, notably due to the success of the Capture Totale skincare products and its make-up lines. In perfumes, existing products continued strong revenue growth. These performances resulted in the perfume and cosmetics business group continuing to gain market share. New products represented about 25% of revenue for this segment. The Givenchy brand launched a men's scent called Very Irrésistible Givenchy. This is Givenchy's first male fragrance. This product represents LVMH's attempt to gain new ground in the men's fragrance business.

The fifth segment, luxury watches and jewelry (Table 1), accounts for 10 percent of the revenue and 5 percent of the operating profit. Watch growth was mostly driven by the high end segment. While sales of low-priced watches lost ground, mid-priced maintained their share, while watches priced $5,000 and up posted sales growth of 14%. LVMH continues to grow in market share and profitability in the luxury watch market. TAG Heur is increasing its position as a star brand with the introduction of new high-end products. TAG utilizes "ambassadors" such as Brad Pitt, Uma Thurman, and Tiger Woods for promotional purposes. This has created name recognition in the U.S.

Table 1 shows the revenue and profits from each business group.

Table 1				
Revenue by Business group	*2012*	*% of Revenue*	*2011*	*2010*
Winers and Spirits	4,137	15	3,524	3,261
Fashion and Leather Goods	9,926	35	3,712	7,581
Perfumes and Cosmetics	3,613	13	3,195	3,076
Watches and Jewelry	2,836	10	1,949	985
Selective Retailing	7,879	28	6,436	5,378
Other Activities and Eliminations	288	1	157	39
Total	28,103	100	23,659	20,320
Operating Profit by Business group	*2012*	*% of Revenue*	*2011*	*2010*
Winers and Spirits	1,260	21	1,101	930
Fashion and Leather Goods	3,264	55	3,075	2,555
Perfumes and Cosmetics	408	7	348	332
Watches and Jewelry	334	5	265	128
Selective Retailing	854	13	716	536
Other Activities and Eliminations	199	1	242	160
Total	5,921	100	5,263	4,321

Table 2
Revenue by Geographic Region

Region	Percent of Revenue
Europe	20
U.S.	23
France	11
Asia (Not including Japan)	28
Japan	8
Other Markets	10

Table 2 shows revenue by region for 2012. LVMH’s revenue is not concentrated in any one geographic market. This trend is also true for the distribution of LVMH’s store in 2012. (Table 3)

Table 3
Number of Stores by Geographic Region

Region	Stores (2012)
Europe	910
U.S.	644
France	412
Asia (Not including Japan)	670
Japan	370
Other Markets	198
Total	3204

Table 4 **Financial Data (2010-**			
	Year		
Euros in millions	*2012*	*2011*	*2010*
Revenue	28,103	23,659	20,320
Net profit	5,921	5,263	4,321
Free cash flow	2,474	2,177	3,073
Earnings per share	6.86	6.27	6.36

From Table 4, we see that all financial indicators (2010-2012 revenue, net profit, free cash flow and total equity) had significant increases. LVMH customers are all within the focus differentiation segment of Porter's generic business strategies. As such, their buying power may not have been affected as much as other firms by the global recession.

McDonald's

McDonald's has come to dominate the fast-food dining industry largely through its effective franchising efforts, its focus on consistent food quality, and its successful markets campaigns. The company's network of franchise operators are all controlled by agreements meant to ensure that a Big Mac purchased in Pittsburgh tastes the same as one bought in Miami. Each restaurant gets its food and packing from approved suppliers that are held to high standards. For some of those suppliers, such as Golden State Foods, Martin-Brower, and J.R. Simplot, servicing McDonald's locations accounts for nearly their entire business.

Table 1

Table 1 shows McDonald's Financial Performance

	2012	2011	2010
Revenues ($ millions)	27.51	27.00	24.07
Net Income ($ millions)	5.46	5.50	4.94
Earnings Per Share	5.36	5.27	4.58

Table 1 shows McDonald's recent performance on selected financial data.

McDonalds has grown its revenues from $22,787 billion in 2007 to $24,075 billion in 2010 (Table 2). In addition, McDonald's has increased net income from $2,395 billion in 2007 to net income of $4,946 billion in 2010 (Table 2).

Company owned stores generated $16,611 billion in 2007 in sales (Table 2). In 2010, McDonald's company owned stores sales remained flat at $16,223 (Table 2). However, franchising revenues increased from $6,176 billion in 2007 to $7,842 billion in 2010 (Table 2).

The global recession has been a boon for McDonald's, as consumers looked to less expensive alternative for feeding their families. Higher unemployment and tighter consumer budgets have led to increased price competition from rival such as Burger King, the #2 burger chain, and the various chains under the YUM! Brands umbrella. In response, McDonald's is focusing heavily on its value-priced menu items. McDonald's sales did increase in 2010 and early 2011 sales have been encouraging.

McDonalds focuses its advertising efforts aimed primarily at families with children, by focusing upon its kid-friendly Happy Meals and budget-minded Value Menu meals. McDonald's is also continuously developing new menu items. Looking to take business from Starbucks, McDonald's is heavily promoting a line of espresso coffee drinks under the banner McCafe. McDonald's has begun to offer fruit smoothie drinks and oatmeal. Within both U.S. domestic and international markets, McDonald's is turning the restaurant space more upscale and comfortable, while offering healthier and more local foods. They are also offering Wi-Fi and rental iPods.

Not all stakeholders are comfortable with McDonald's practices. McDonald's has had to increasingly battle its public image as a provider of fatty, unhealthy food. Consumers began filing lawsuits contending that years of eating at McDonald's had made them overweight. In

May 2010, People for the Ethical Treatment of Animals (PETA) purchased a block of McDonald's stock in order to introduce a shareholder resolution aimed at pressuring McDonald's to require its suppliers to upgrade their outdated slaughter practices. McDonald's responded by introducing low-calorie menu items and switching to a more healthy cooking oil for its french fries. In addition, McDonald's has made some menu changes in an attempt to update its image as solely a restaurant of unhealthy foods. In 2010, McDonald's introduced Real Fruit smoothies and the Angus Snack Wrap. In 2011 McDonald's introduced Fruit and Maple Oatmeal to its menu.

McDonald's International Position

The company's business is divided into the following geographic segments: Europe, the US, APMEA (Asia Pacific, Middle East, and Africa). Recently McDonald's has demonstrated growth internationally.

McDonald's has expanded to international markets in the face of increasing regulations in the United States and domestic market saturation. They initially entered international markets by leveraging standardized product offerings, provided clean bright environments, and focused upon American brand equity. However, recent years have seen McDonalds adapt to local regions by remodeling its retail space while changing some of its product lines to appeal to local tastes. McDonald's has realized that they must adapt to each country they enter, their tactics of both catering to local tastes and changing the restaurant's design this approach has allowed them to develop significant positions in many international markets. This approach of standardization with some country adaptation has served them well as they continue to expand into existing and new international markets.

Table 2
McDonald's International Position

Line Segments (In millions)	2012	2011	2010
U.S.	8,813	8,528.2	8,111.6
Europe	10,827.4	10,886.4	9,569.2
APMEA	6,391.1	6,019.5	5,065.5
Other Countries and Corporate	1,534.8	1,571.9	1,328.3
Total Revenues (In millions)	27,567	27,006	24,074.6
U.S.	3,750.4	3,666.2	3,446.5
Europe	3,195.8	3,226.7	2,796.8
APMEA	1,566.1	1,525.8	1,199.9
Other Countries and Corporate	92.3	111.0	29.9
Total Operating Income:	8,604.6	8,529.7	7,473.1

From Table 2, McDonalds has exhibited strong financial growth in both domestic and international markets. Europe is McDonald's largest market followed by the U.S. and then APMEA.

Table 3

Growth of Financial Indicators

Market	Growth of Revenue (Percent 2012-2010)	Growth of Operating Income (Percent 2012-2010)
U.S.	9	1
Europe	13	14
APMEA	26	13

From Table 3, it appears that the U.S. is a mature market while Europe and APMEA appear to be growing markets.

Oracle

Oracle specializes in computer hardware systems and enterprise software products, including the Oracle brands of database management systems (DBMS). The company also builds tools for database development and systems of middle-tier software, enterprise resource planning software (ERP), customer relationship management software (CRM) and supply chain management (SCM) software. Over the years, they have further expanded into servers, storage, operating systems, middleware, databases, and virtualization technology.

Oracle's position is to focus on 3 factors:

1. Drives growth: Oracle drives growth through enterprise performance management, aligning strategy, planning and execution and allowing business organizations to improve forecast accuracy, optimize resource allocations, and achieve profitable growth.
2. Helps manage risk: Oracle helps top management executives in firms with advanced financial controls by continuously monitoring financial processes, allowing them to reduce cash leakage, improve working capital and ensure accuracy.
3. Reducing costs: Oracle helps keep costs down while keeping a steady growth stream. ERP cloud service from Oracle provides a modern, cost effective business platform allowing business to run operations with less investment, scale effectively with consistent global processes, and boost workforce productivity and collaboration.

Oracle has continued to grow and the popularity of its products continued to increase among its customers. The company consistently released new versions of Oracle every year that integrated new features and technologies. Oracle has expanded into new application divisions, servers, storage, operating-systems, middleware, databases, and virtualization technology, providing customers with flexibility across their IT infrastructure.

Oracle Corp. wanted to give their customers unmatched benefits similar to industry leading products, including excellent system availability, scalability, energy efficiency, powerful performance, at low total cost of ownership. Through their product strategy and strategic acquisitions, Oracle has been able to achieve these objectives. Acquisition activities help Oracle strengthen its product offerings, accelerate innovation, meet customer demand more rapidly, and expand partner opportunities.

Oracle's acquisition of PeopleSoft was significant. On December 13, 2004, Oracle acquired PeopleSoft for $10.3 billion (a 27% premium) or $26.50 per share. The original offer on June 2003 had been for $16.00 per share. This was a hostile takeover which had lasted over 18 months.

Oracle generates the majority of its sales from its database software, has struggled to compete with the likes of PeopleSoft and industry leader SAP in the field of application software, which businesses use to automate routine corporate tasks such as human resources and supply chain management.

A combined Oracle-PeopleSoft could be a tougher competitor to SAP, which many analysts say has benefited from the turmoil that the year-and-a-half long takeover battle has created in the software market.

Overall, most of Oracles objectives were met. Since the acquisition, Oracle has remained profitable. PeopleSoft's software license and customer base services contribute about $645. Oracle believes the acquisition of PeopleSoft was an important strategic move focused at consolidating the business application software segment. Nearly all of the segments in Oracle's income statement have experienced an increase in revenues. New software license sales accounted for 33% of the total revenue and 27% of profit for Oracle in 2005. Also in 2005, software license updates and product support accounted for 47% of total revenue and 67% of the profit. Even though Oracle was very successful at increasing revenues and margins, their expenses increased as well. Oracle's total operating margin decreased from 38% in 2004 to 34% in 2005.

In 2010 Oracle Corporation (Oracle) is one of the world's largest enterprise software and hardware systems companies. The company acquired Sun, a provider of hardware systems, software and services, for $7.3 billion in January 2010, to enter the hardware systems business. The acquisition of Sun Microsystems also expanded Oracle's portfolio of software and services offerings. The company mainly operates in the U.S. It is headquartered in Redwood City, California and employs about 105,000 people.

Oracle acquired Sun Microsystems, a provider of IT hardware software and services, in January 2010. The acquisition provided several benefits for Oracle, including a presence in hardware systems business, and enhanced its existing software and services businesses with additional offerings. In the hardware systems business, Oracle added SPARC family of microprocessors, computer servers, and storage product offerings, including tape, disk, and networking solutions for open systems and mainframe server environments. In the software and service businesses, Oracle added Solaris operating system, MySQL database, Java programming language, middleware applications, various tools and related services. The acquisition provides several advantages to Oracle including access to a wide range of Sun's customers. This acquisition allows Oracle to diversify its presence into IT hardware, and strong operating systems and programming language presence. Further, it also provides significant competitive advantage over players such as IBM, HP and Microsoft.

Through the combination of Oracle's software and Sun's hardware, Oracle looked to establish a competitive edge within its industry. Oracle intended to use this competitive edge to match the product offering of one of its biggest competitors, IBM. These objectives served as Oracle's reasoning behind its acquisition of Sun; however, the results from the acquisition are equally significant and serve as a measure of how successful the acquisition has been.

Sun Microsystems

On April 20th, 2009, four years after the acquisition of PeopleSoft, Oracle reached an agreement to acquire Sun Microsystems for $7.4 billion. This price represented a 42% premium on the value of the company's stock on that date. The acquisition, which was finalized on January 27, 2010, supports Oracle's overall acquisition strategy. However, Oracle had a specific set of objectives to accomplish with its acquisition of Sun Microsystems. By acquiring Sun Microsystems, Oracle sought to increase its profitability and ability to offer a broad range of complementary products to its customers. Oracle also sought to increase its competitiveness through the acquisition.

The major objective of the acquisition was to increase Oracle's profitability. Specifically, the company's objective was to obtain profits of $1.5 billion in the first year and $2 billion in the second year from sales resulting from the acquisition (Malik, 2009). Oracle had projected the increase in profits to come from synergies resulting from the combination of its software products with the hardware products Sun already provided. In the words of Oracle's CEO, Larry Ellison, "Oracle will be the only company that can engineer an integrated system – applications to disk – where all the pieces fit and work together so customers do not have to do it themselves" (Malik, 2009). Through the combination of Oracle's software and Sun's hardware, Oracle looked to establish a competitive edge within its industry. Oracle intended to use this competitive edge to match the product offering of one of its biggest competitors, IBM. Oracle's focus was to strengthen their market position through acquisitions that would enhance their current portfolio of products and services that they believed would improve their research and development in order to accelerate innovation.

Table 1 shows how Oracle has grown via acquisitions up to 2010.

Table 1

Oracle Acquisitions

FIRM NAME	DATE OF ACQUISITION	PRIMARY FOCUS
Indicast	2002	-Voice Technology
Netforce	2002	-Intellectual Property Rights for Voice Technology
Netforce	2002	-Voice Technology
Retek	2005	-Software Services to Retak Industry
PeopleSoft	2005	-Business Solutions Software Provider
Siebel Systems	2006	-Customer Relationship Management Software
Sleepycate	2006	-"Open Source" Database
Hotsip AB		-Swedish Telecommunications Software
Hyperichn	2007	-Performance Based Management Software
Tangosol	2007	-Data Grid Software
Appforge	2007	-Mobile Application Software
mV	2009	-Management Application
Silver Creek Systems	2010	-Product Data Quality Application
Sun Microsystems	2010	-Hardware

Oracle has not slowed down in terms of acquiring firms. The following acquisitions have had a significant impact upon the markets Oracle has targeted in the 2012 to 2013 time frame.

Table 2
Oracle's Recent Acquisitions

Date of Acquisition	Firm Name	Primary Focus
2012	Eloqua	Provider of cloud based marketing automation and revenue performance management
2013	Big Machines	A cloud based firm for providing configurations and prices
2013	Acme Packet	Global provider of session border control technology for service providers
2013	Tekelec	Provider of network signaling, policy control, and subscriber data management solutions
2012	Instantis	Cloud based on premise project portfolio management firm for IT and new product development
2012	Clear Trial	Cloud based clinical trial operations and analytic application firms
2013	Bitzer Mobile	Mobile applications management solutions firm
2013	Responsys	Cloud software firm

Table 3

Oracle

Current Financial Data

Year	Revenue ($ millions)	Net Income ($ millions)	Earnings per share
2010	26.82	6.13	85.37
2012	35.68	9.09	108.34
2013	39.33	10.75	127.98

As can be seen from Table 3, Oracle's financial position has increased from 2010 to 2012 on key financial metrics.

Appendix

U.S. Domestic Data Sources	
Source	**Contents**
Annual Reports and 10-K reports	Detailed firm level data
Standard Industrial Classification (SIC)manual	Classifies firms into industries
North American System Industry Classification (NAICS)	Classifies firms in the U.S., Canada, and Mexico into industries
Hoover Online Directory (www.hoovers.com)	Current financial data on firms
Million Dollar Directory	Classifies firms into industries and provides both qualitative and quantitative information on firms
Standard &Poors Corporate Directory	Provides firm level data
Security & Exchange Commission (www.sec.gov)	Provides firm level data
Dun & Bradstreet (http://smallbusiness.dnb.com)	Provides annual firm level data for public and private companies
Business Source Elite	Includes some full-text. Business related topics, including detailed company profiles (covers 1985 – present)
Hoovers Company and Industry database	Comprehensive collection of corporate, industry, news and financial information
Lexis Nexis	Full-text company news and financial information.
Small Business Center	Company needs for small businesses www.infotrac.galegroup.com
Valueline	Both firm and industry level which is updated every 3 months
Valueline Investment	An investment information service that covers some 1,700 equity issues.
First Research Industry Database	Contains industry, news and financial information

International Data Sources	
Source	**Contents**
Statistical Yearbook (published by the United Nations)	International trade data on imports at the country level
World Atlas (published by World Bank: www.worldbank.com)	Country data containing population, growth trends, and GNP statistics
World Trade Organization (www.wto.org)	Annual trade data by member countries
EuropeanUnion (www.europa.eu.int)	Annual data on member countries
UN publications (http://unp.un.org)	Extensive data on member countries
LANIC (www.lanic.utexas.edu)	Data on Latin and South American countries
Asia-Pacific Economic Cooperation (www.apecsec.org.sg)	Data on Pacific Rim countries
International Standard of Industry Classification (ISIC) manual	Data on international firms and industries
International Trade Commission	Provides data on trade between member countries
International Monetary Fund (IMF)	Provides current information on the world economic outlook
ABI/INFORM	• Source of international information and data which is sourced from the Wall Street Journal and over 7000 current annual reports for over 1000 North American firms • Tracks the economic, political and market developments around the world with country reports. Has over 190,000 reports from 195 countries, providing concise analysis of market conditions worldwide
ISI Emerging Markets	Follows 80 emerging markets throughout the world. Contains financial statements and firm level data on firms within these 80 markets.

Glossary

A

Acquisition A strategy through which one firm buys a controlling (over 50 percent) interest in another firm with the intent of making the acquired firm a subsidiary business.
Automation The degree to which manufacturing processes do not involve manual labor.

B

Balanced Scorecard Multidimensional approach of measuring corporate performance through financial and non-financial factors.
Board of Directors A group of elected individuals whose primary responsibility is to act in the owners' interests by formally monitoring and controlling a corporation's top-level executives. The board of directors has ultimate responsibility for increasing shareholder wealth.
Business level strategy How a firm competes in a given product/market.

C

Capabilities The skills and routines that allow the company to exploit its resources in ways that are valuable and difficult for other firms to imitate.
Competencies Links key resources and capabilities to satisfy customer needs and provides access to new markets; these capabilities may be very hard for competitors to imitate.
Competitive advantage occurs when a firm implements a strategy that competitors are unable to duplicate or find too costly to try to imitate.
Concurrent Engineering (CCE) A TQM initiative utilized to ascertain which vendors are either more efficient or better qualified to source raw materials.
Continuous Process Improvement (CPI) A TQM initiative utilized to ascertain whether a firm should continue to outsource its inbound transportation network versus the firm developing its own transportation network for obtaining raw materials.
Core Competencies Capabilities that serve as a source of competitive advantage for a firm over its rivals (e.g. Dell Direct).
Corporate-level strategy Actions a firm takes to gain a competitive advantage by selecting and managing a group of different businesses competing in different industries.

D

Dominant Logic The degree to which the management team understands the customers, key buying criteria, and competition within its various industries. The management team needs to have sufficient knowledge within industries in which it has market positions.
Downscoping Divesture, spin-off, or some other means of eliminating businesses that are unrelated to a firm's core businesses.
Downsizing A reduction in the number of a firm's employees and, sometimes, in the number of its operating units.
Due diligence Process through which a potential acquirer evaluates a target firm for a potential acquisition.

E

Earnings Per Share (EPS) Calculated by dividing net profit into the number of shares outstanding.

Economic Value Added (EVA) Income after the cost of debt and the cost of equity has been deducted. Measures the extent to which the firm has increased shareholder wealth.

Economies of scale Potential cost savings from processes in which an increase in the size of the firm causes a decrease in the long run average cost of each unit.

Economies of scope Potential cost savings from combining the production of disparate products provided that they rely on the same management structure, administration systems, marketing departments, and R&D.

F

Financial Ratios

- **Liquidity Ratios**
  - **Current Ratio** measures the firm's ability to pay short-term liabilities from short-term assets
  - **Quick Ratio** measures the ability of the firm to meet its short-term obligations from current assets (not including inventory).
- **Asset Management Ratios** measure a firm's effectiveness at managing its assets
  - **Asset Turnover** Sales, generated in a particular year, divided by the value of total assets for the same period.
  - **Inventory Turnover** measures the number of times that average inventory was turned over during the year.
  - **Fixed-Asset Turnover** measures how much revenue is generated by each dollar of fixed assets.
  - **Average Collection Period** the amount of time required to receive payment after sales.
- **Debt Management Ratios** measure the extent to which a firm uses debt financing. If the firm earns more on investments financed with borrowed funds than it does in interest, then its shareholders' returns are magnified, or "leveraged".
  - **Debt-to-Assets Ratio** measures the extent to which borrowed funds have been used to finance the firm's assets.
  - **Debt-to-Equity Ratio** compares the funds provided by creditors to funds provided by stockholders.
  - **Long-term Debt-to-Equity Ratio** measures the balance between debt and equity.
- **Profitability Ratios** represent how well a firm is allocating its resources.
  - **Gross Profit Margin** represents the total margin available to cover operating expenses and generate a profit.
  - **Net Profit Margin** reflects how much profit is generated by each sales dollar.
  - **Return on Assets (ROA) -** Net profit, generated each year, divided by the value of total assets for the same period.
  - **Return on Equity (ROE) -** Net profit, generated each year, divided by the value of owner's equity for that year.
  - **Return on Sales (ROS) -** Net profit, generated each year, divided by total sales for the same period.

Flexible Manufacturing A computer-controlled process used to produce a variety of products in moderate, flexible quantities with a minimum of manual intervention.
Free Cash Flow The money left after investment that a company could either put in the bank or give to shareholders as dividends.

G

G.E. Matrix A framework for identifying a firm's position(s) on factors related to industry attractiveness and the firm's own business strengths.

H

Hostile Takeover Special type of acquisition strategy wherein the target firm does not wish to be acquired.

I

Industry analysis An assessment of the attractiveness of an industry based on (Porter's 1980) five forces- the bargaining power of buyers, the bargaining power of suppliers, degree of rivalry, threat of new entrants and threat of substitute products.
Industry Life Cycle

> **Introduction stage** This stage is dominated by the marketing of an innovation for the first time. Competition is minimal (if any). The firm becomes a first mover. Returns during this stage are not positive because the first mover must recover costs of product development, advertising, and manufacturing.
> **Growth stage** The stage of the industry life cycle when profits rise; product reliability increases as does the competition. Firms differentiate based upon value/quality.
> **Maturity stage** Sales tend to be the highest during this period. The industry faces significant price pressure because customers view a firm's offering as homogeneous. Margins are negatively impacted because price becomes the dominant key buying criteria.
> **Decline stage** Revenues and profits are reduced significantly during this stage. Firms may choose to allocate resources to products/markets which are at earlier stages of the life cycle.

Innovation Putting an invention or other important discoveries into widespread use (e.g. laser)
International Strategy A strategy through which a firm sells its goods or services outside its domestic market. Typical modes of international entry are exporting, licensing, franchising, strategic alliances, acquisitions, mergers and foreign direct investment (FDI).

J

Joint Venture A strategic alliance in which two or more firms create a legally independent company to share some of their resources and capabilities to develop a competitive advantage.
Just in time (JIT) Inventory management approach in which a company products only what the customer wants, in the quantities the customer actually requires, and when the customer needs it.

K

Key buying criteria Factors that dictate the purchase of a product/service.

L

Leverage Total assets at the end of the period divided by owner's equity for the same period.
Licensing A legal arrangement whereby one company permits another firm to produce and sell the company's products for royalties.

M

Market Capitalization (from the perspective of the Simulation) This statistic is measured by multiplying the stock price per share times the number of shares outstanding.
Market Value Added (MVA) Market value less capital invested.
Mean Time Before Failure (MTBF) Reliability of product, expresses in hours.
Merger A strategy through which two firms agree to integrate their operations on a relatively coequal basis.
Mission Specifies the business or businesses in which the firm intends to compete and the customers it intends to serve.

N

Net Income Value of profits as calculated on the Income Statement
Net Margin Value of total sales less variable and period costs
Net Profit Earnings left after all expenses are paid. Net profit can only be allocated to one of two directions. It is either paid out to the owners of the business, in the form of a dividend or it is retained in the business to grow the company and is thus added to the Retained Earnings of the business.

P

P/E Ratio The closing stock price divided by the earnings per share (EPS). The P/E is sometimes referred to as the earnings multiple or simply the multiple.
Porter's Five Forces See Industry Analysis

R

Resources An organization's basic financial, physical, and human capital assets.
Restructuring A strategy through which a firm changes its set of businesses or its financial structure.
Retained Earnings Total of all company profits and losses over the life of the company, less any dividends paid out. The monies are captured in the assets of the company. This may be cash but it may just as easily be in the form of plant or even accounts receivable.

S

Sales Forecasting

> **Delphi Technique** An iterative process of forecasting a future event based upon experts who are dispersed geographically

Executive Judgment The senior level executives within a firm, based upon their judgment, predict sales forecasts at the industry and product market level.
Exponential Smoothing Projects next year's sales by combining an average of past sales and more recent sales giving more weight to the latter.
Naïve Method Developed based upon historical (usually last year's) sales and growth rates.
Regression Analysis This technique requires the use of historical sales data. The forecaster seeks to find a relationship between past sales (the dependent variable) and one or more independent variables, such as population, per capita income, or gross domestic product. An accurate forecast depends upon identifying a specific relationship between the dependent and independent variables.
Scenario Analysis This technique is used to generate strategic alternatives based on varying assumptions about the future. A scenario is a possible set of environmental circumstances concerning what the environment may look like in the future. It depicts potential actions and events in a likely order of occurrence, beginning with a set of conditions that describe the current situation.
Test Market Study Actually selling the product in a number of specific markets. Actual cost and revenue data can be gathered from each market.
Time Series Analysis The forecaster uses the firm's historical sales data to attempt to discover a pattern or patterns in the firm's sales over time. If a pattern is found, it can be used to forecast future sales. This forecasting method assumes that past sales patterns will continue in the future.

Stakeholders Those who affect and are affected by a company's actions and results.
Strategic Leaders People located in different parts of a firm who use the strategic management process to help the firm reach its vision and mission.
SWOT Analysis Strengths, weaknesses, opportunities and threats analysis; examining the internal strengths and weaknesses of a firm, comparing them with external opportunities and threats, and matching the two in order to choose a strategy based on the analysis. SWOT can also be used to determine the position of competitors.
Synergy When the value created by business units working together exceeds the value that those same units create working independently.

T

Total Quality Management (TQM) Initiatives Activities designed to achieve enhanced productivity and increase quality at the same time;
Benchmarking reduces administrative costs.
Channel Support Systems (Sales Force Support) Increases demand.
Concurrent Engineering (CCE) Reduces R&D cycle time.
Continuous Process Improvement (CPI) Reduces material and labor costs
Quality Function Deployment Effort reduces R&D cycle time and increases demand.
Quality Initiative Training (QIT) reduces labor costs.
6 Sigma Training reduces material and labor costs.
Vendor/Just-In-Time (JIT) Reduces material costs and administrative overhead.

V

Value Chain The primary and support activities a firm undertakes to deliver products and services to customers; each element in the value chain can be broken down to determine how profitable it is. Consists of primary activities which examine the product from source of raw material to after sales service. Secondary activities (e.g. technology) provide support for the primary activities.

Vertical Integration Corporate structure in which a company combines production, distribution, and/or sales within its organization.

Vision A picture of what a firm wanted to be and, in broad terms, what it wants to ultimately achieve.

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