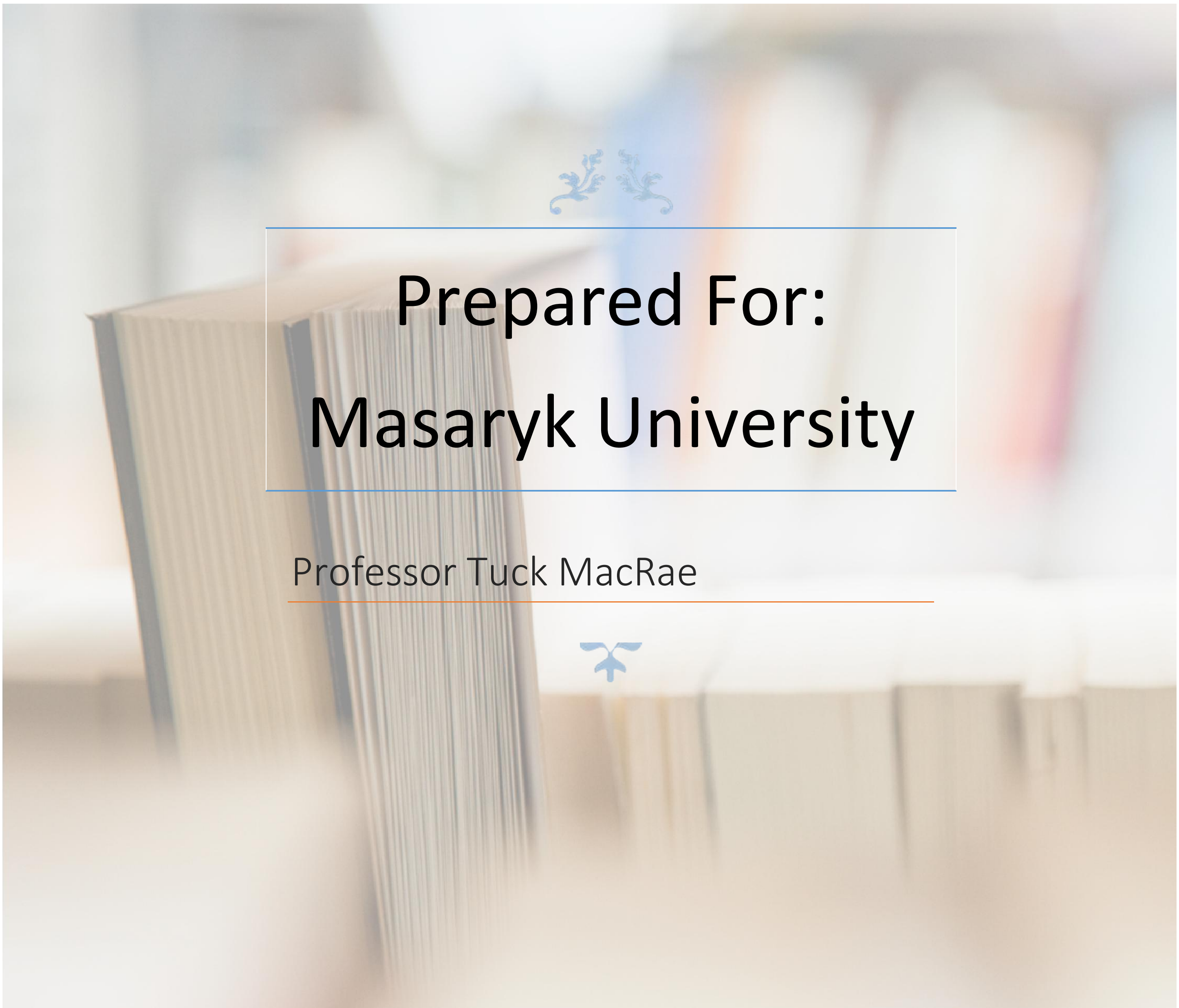

Prepared For:
Masaryk University

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Preface

This guide has been compiled as a course supplement for the Strategic Management course delivered at Masaryk University in the Czech Republic. It is a compilation of information and models gathered from a variety of sources by the author. It must be understood by all readers that the field of Strategic Management is not static, but rather, is an evolution of concepts and ideas. As such, this study guide represents the author's preferred approach to the subject and incorporates many modifications to the traditional academic models and works. These modifications are based on practical experience as a corporate executive and are by no means intended to negate the validity of other approaches nor are they meant as a contradiction of the basic underpinnings on which they are premised.

In order to demonstrate the use of the analytical models in this guide, an integrative case will be used in class. The case study stemmed from a consulting contract with a hockey team in the NHL (National Hockey League). The team was in deep financial trouble and the author was engaged to formulate a strategy and implementation plan focused on ensuring the team's survival. Each analytical model was used when formulating the strategy. Each student is required to read the case study and to apply the individual analysis techniques to the case as specified in the course syllabus. Students will be asked to present their analysis at the beginning of each class, prior to the lecture.

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Introduction

Why are some companies successful while others struggle just to stay afloat? Is the answer better products, better marketing, more efficient production, better quality, timely delivery? Is it a productive organization with a supportive culture and effective leadership? Or is it some combination of the way the organization operates and the quality of its management? These types of questions demand answers if a company is to be successful in today's increasingly competitive and turbulent environment. The answers may vary, but they all focus on one basic requirement; In order to succeed, a company must offer value to its customers, that is, it must provide total value. Value represents the customer's perception of what is delivered, at what price, and with what features that serve their real needs. Strategic management is a means for ensuring that organizations can cope effectively with the myriad of demands placed on them from within and without. This guide aims to provide an understanding of the strategic management process and of methods that can be used to formulate appropriate strategies. These tools can help companies achieve and sustain a competitive advantage.

Strategic Thinking

Strategic management is essential for dealing with the continuous stream of changes that flood all organizations. Managers need to cope with pressures of rapid change in order to achieve organizational goals effectively. Thus "strategic thinking” is an on-going process in which significant events are dealt with in a comprehensive manner. For example, Michael Porter, Harvard Business School, describes strategic thinking as being intimately linked with implementation. He states, "There are no substitutes for strategic thinking. Improving quality is meaningless without knowing what kind of quality is relevant in competitive terms. Nurturing corporate culture is useless unless the culture is aligned with the company's approach to competing. Entrepreneurship, unguided by a strategic perspective, is much more likely to fail than succeed. And, contrary to popular opinion, even Japanese companies use strategic thinking. The successful ones are strong believers in planning and avid students of their industries and competitors”.

In their article "The Anatomy of Strategic Thinking,” J. Roger Morrison and James G. Lee describe strategic thinking in the following cogent terms: "The successful strategic thinker is guided by a clear business concept based on a thorough understanding of the economics of [the] business and of the success factors in [the] industry."

Based on past experiences, judgment, and feelings, intuition is essential to making good strategic decisions. Intuition is particularly useful for making decisions in situations of great uncertainty or little precedent. It is also helpful when highly interrelated variables exist, when there is immense pressure to be right, or when it is necessary to choose from several plausible alternatives. These situations describe the very nature and heart of strategic management.

Some managers and owners of businesses profess to have extraordinary abilities for using intuition alone in devising brilliant strategies. For example, Will Durant, who organized General Motors Corporation, was described by Alfred Sloan as "a man who would proceed on a course of action guided solely, as far as I could tell, by some intuitive flash of brilliance. He never felt obliged to make an engineering hunt for the facts. Yet at times, he was astoundingly correct in his judgment." Albert Einstein acknowledged the importance of intuition when he said. "I believe in intuition and inspiration.

At times I feel certain that I am right while not knowing the reason. Imagination is more important than knowledge, because knowledge is limited, whereas imagination embraces the entire world."

Although some organizations today may survive and prosper because they have intuitive geniuses managing them, most are not so fortunate. Most organizations can benefit from strategic management, which is based upon integrating intuition and analysis in decision making. Choosing an intuitive or analytic approach to decision making is not an "either/or" proposition. Managers at all levels in an organization should inject their intuition and judgment into strategic-management analysis. Analytical thinking and intuitive thinking complement each other.

It is superior strategic thinking, not sophisticated planning systems, which underlie most successful competitive strategies. Effective strategic thinking focuses on achieving a competitive advantage by gaining and holding the initiative. Good strategic thinking also implies an understanding of how situations will change over time. Business strategy, like military strategy, is a matter of manoeuvring for superior position, anticipating how competitors will respond and with what degree of success. Successful strategists aim to keep one step ahead of the competition. They plan their moves well in advance based on intuition, knowledge and information and have contingency plans for the most likely outcomes.

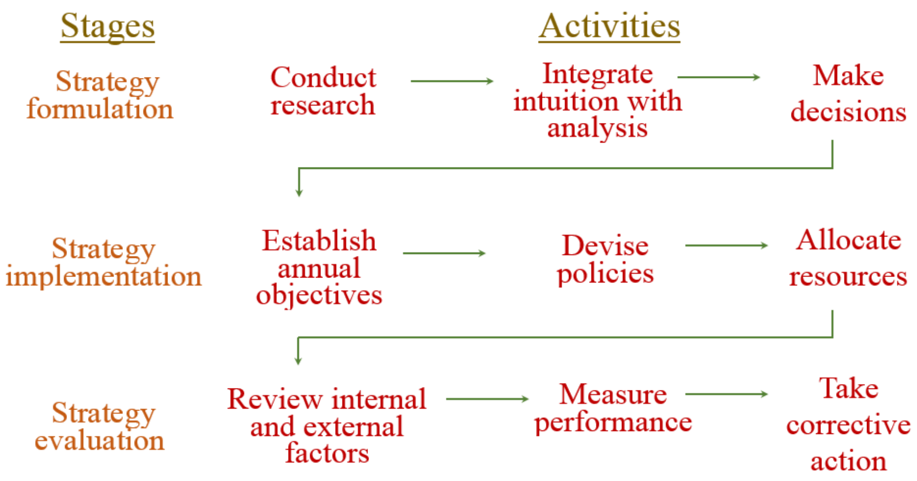
There were two company presidents who competed in the same industry. These two presidents decided to go on a camping trip to discuss a possible merger. They hiked deep into the woods. Suddenly, they came upon a grizzly bear that rose up on its hind legs and snarled. Instantly, the first president took off his knapsack and got out a pair of jogging shoes. The second president said. "Hey, you can't outrun that bear." The first president responded, "Maybe I can't outrun that bear, but I can surely outrun you!" This story captures the notion of strategic management.

No matter how they are arrived at, strategic decisions affect the very survival of an organization, and consequently, they require some mix of information analysis and strategic thinking. The former president of A&E Plastipak, Bernard Denburg, stressed this when he said, "Strategic thinking is the continuous process of managing strategy consistent with strategic goals and cultural values of the organization." Strategic thinking, then, starts with the strategy formulation process and moves beyond merely doing an analysis of data. Strategy formulation involves knowing the competitive environment and knowing how to allocate resources, how to restructure organizations, and how to implement plans. It also involves managing the strategy formulation process. To do this, executives must be leaders with vision who are also aware of the behavioural factors that influence performance and the cultures that support the core values and mission of the organization.

Strategic Management Defined

Strategic Management can be defined as the art and science of formulating, implementing, and evaluating cross-functional decisions that enable an organization to achieve its objectives. As this definition implies, strategic management focuses on integrating all areas of the business and organization to achieve organizational success.

The strategic-management process consists of three stages: Strategy formulation, Strategy implementation, and Strategy evaluation.



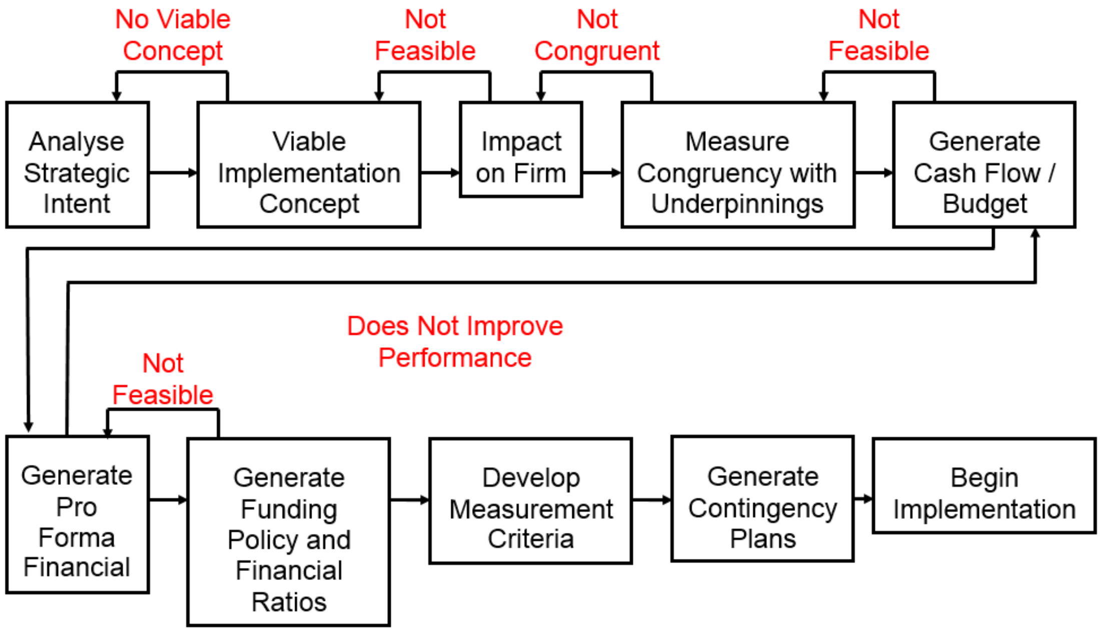
Strategy formulation includes; developing a business mission, identifying an organization's external opportunities and threats, determining internal strengths and weaknesses, establishing long-term objectives, generating alternative strategies, and choosing particular strategies to pursue. Strategy formulation issues include; deciding what new businesses to enter, what businesses to abandon, how to allocate resources, whether to expand operations or diversify, whether to enter international markets, whether to merge or form a joint venture, how to avoid a hostile takeover, or a combination of the above.

No organization has unlimited resources. For this reason strategists must decide which alternative strategies will benefit the firm most. Strategy formulation decisions commit an organization to specific products, markets, resources, and technologies over an extended period of time. Strategies determine long-term competitive advantages. For better or worse, strategic decisions have major multifunctional consequences and enduring effects on an organization. Top managers have the best perspective to understand fully the ramifications of formulation decisions; they have the authority to commit the resources necessary for implementation. That said, every member of the organization can play a key role in providing the information and knowledge required during the decision making process.

Strategy implementation requires a firm to establish annual objectives, devise polices, motivate employees, and allocate resources so that formulated strategies can be executed; strategy implementation includes developing a strategy-supportive culture, creating an effective organizational structure, redirecting marketing efforts, preparing budgets, developing and utilizing information systems, and linking employee compensation to organizational performance.

Strategy implementation is often called the action stage of strategic management. Implementing strategy means mobilizing employees and managers to put plans into action. Often considered to be the most difficult stage in strategic management, strategy implementation requires personal discipline, commitment, and sacrifice. Successful strategy implementation hinges upon management’s ability to motivate employees. Strategies formulated but not implemented serve no useful purpose.

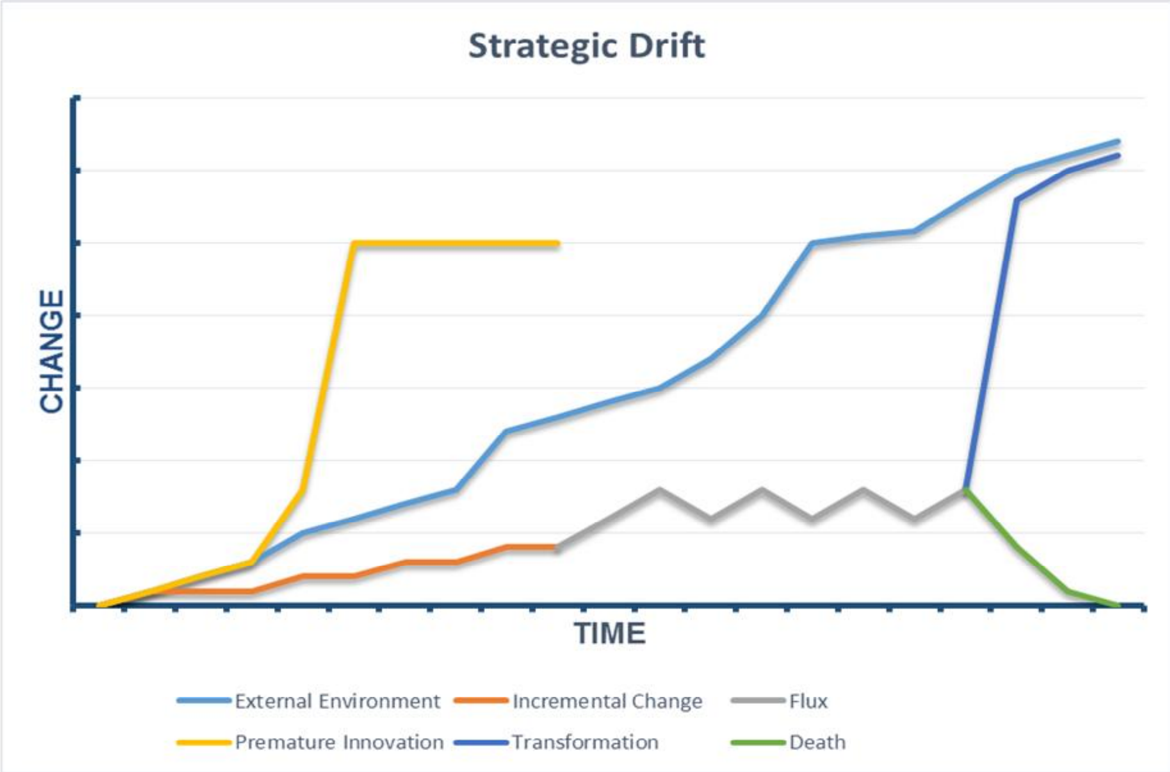
Implementation Framework



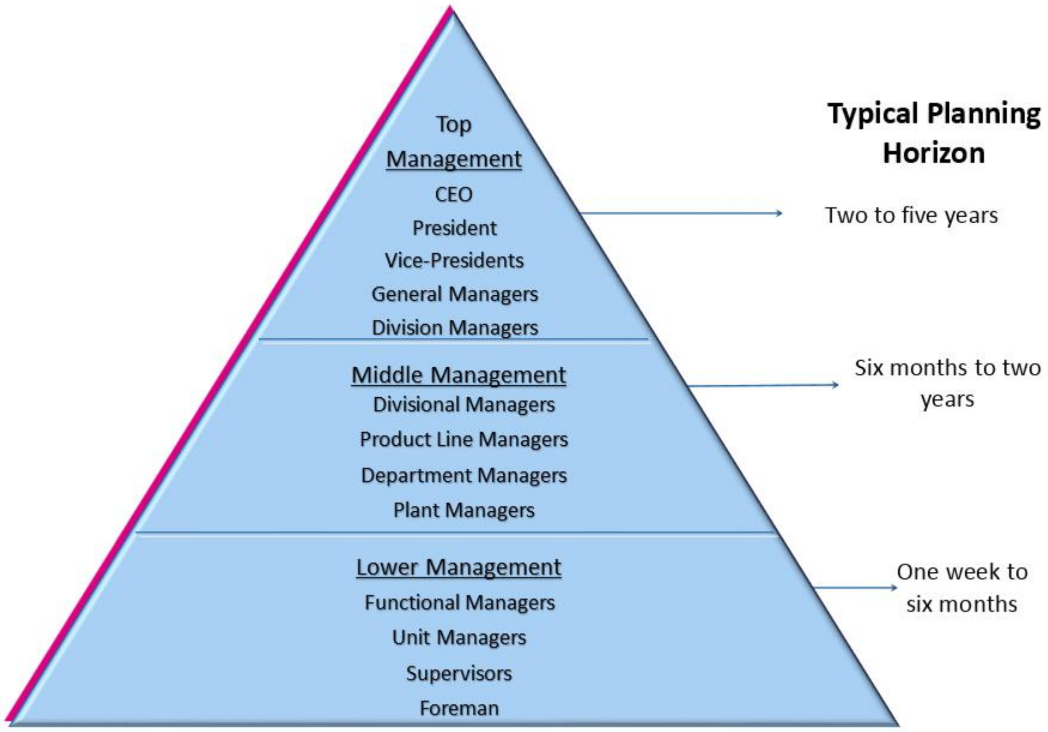
Interpersonal skills are especially critical for successful strategy implementation. Implementation activities affect all employees and managers in an organization. Every division and department must decide on answers to questions such as "What must we do to implement our part of the organization's strategy?" and "How best can we get the job done?" The challenge of implementation is to stimulate managers and employees throughout an organization to work with pride and enthusiasm toward achieving the stated objectives.

Strategy evaluation is the final stage in the process. Managers desperately need to know when particular strategies are not working well; strategy evaluation is the primary means for obtaining this information. All strategies are subject to future modification because external and internal factors are constantly changing. Three fundamental strategy-evaluation activities are (1) reviewing external and internal factors that are the bases for current strategies, (2) measuring performance, and (3) taking corrective actions. Strategy evaluation is needed because success today is no guarantee of success tomorrow. Success always creates new and different problems; complacent organizations experience demise and inevitably suffer from strategic drift.

Strategic drift occurs when an organization’s strategies change incrementally over time but fail to remain current with the expectations of the external environment. These incremental changes tend to be linked more to company culture and historical performance than an understanding of the external environment. Many company executives are reluctant to make large changes in the strategy of the firm when their past and present performance is meeting the profit expectations of investors. Kodak is a prime example of this tendency. Up until 2011, Kodak management was convinced that people would continue to buy traditional instant cameras and that there was no threat from the Smartphone or Tablet markets. Since that time, Kodak has had to reinvent itself as a technology driven imaging business serving the commercial sector.



Strategy formulation, implementation, and evaluation activities occur at three hierarchical levels in a large organization: corporate, divisional or strategic business unit, and functional. By fostering communication and interaction among managers and employees across hierarchical levels, strategic management helps a firm function as a competitive team. Most small businesses and some large businesses do not have divisions or strategic business units; instead, they have corporate and functional levels. Nevertheless, managers and employees at these two levels should be actively involved in strategic-management activities.



The strategic-management process can be described as an objective, logical, systematic approach for making major decisions in an organization. It attempts to organize qualitative and quantitative information in a way that allows effective decisions to be made under conditions of uncertainty. Yet, strategic management is not a pure science that lends itself to a nice, neat, one-two-three approach.

Key Considerations

Global considerations impact virtually all strategic decisions. The boundaries of countries can no longer define the limits of our imaginations. To see and appreciate the world from the perspective of others has become a matter of survival for businesses. The underpinnings of strategic management hinge upon managers' gaining an understanding of competitors, markets, prices, suppliers, distributors, governments, creditors, shareholders, and customers worldwide. The price and quality of a firm's products and services must be competitive on a worldwide basis, not just a local basis. Profit sanctuaries based on geographic location are becoming rare and will disappear entirely as the age of globalization continues.

Information technology has become a vital strategic-management tool. Companies are gaining competitive advantage by using the Internet for communication with suppliers, customers, creditors, partners, shareholders, clients, and competitors. Many of these people or organizations are globally dispersed and in some cases, geographically isolated. On-line services allow firms to sell products, advertise, purchase supplies, bypass intermediaries, track inventory, eliminate paperwork, and share information. In total, electronic commerce is minimizing the expense and cumbersomeness of time, distance, and space in doing business. This use of technology yields better customer service, greater efficiency, improved products, and higher profitability.

Information technology and globalization are external changes that are transforming business and society today. On a political map, the boundaries between countries may be clear but on a competitive map showing the real flow of financial and industrial activity, boundaries have largely disappeared. Speedy flow of information has largely eaten away at national boundaries so that people worldwide readily see for how other people live. People are travelling abroad more and people are emigrating more. We are becoming a borderless world with global citizens, global competition, global customers, global suppliers, and global distributors.

The need to adapt to change leads organizations to key strategic-management questions, such as: What kind of business should we become? Are we in the right fields? Should we reshape our business? What new competitors are entering our industry? What strategies should we pursue? How are our customers changing? Are new technologies going to be developed that could put us out of business?

The strategic-management process is based on the belief that organizations should continually monitor internal and external events and trends so that timely changes can be made as needed. The rate and magnitude of changes that affect organizations are increasing dramatically. The strategic management process is aimed at allowing organizations to adapt effectively to change over the long run.

Total Value

In many cases, strategy isn't about beating the competition; it's about serving customers' real needs or desires. When one recognizes that customers have changing expectations, it becomes obvious that the way to beat competitors is to deal directly with what the customer wants. The smartest strategy in war is to avoid the battle. There is no better proof of the validity of this statement than the price wars that ensue when strategy deteriorates into cost competition alone. The battle in the Tablet, PC, and Smartphone industries illustrates that price wars simply erode the profits of all the suppliers of a product and rarely lead to a sustainable competitive advantage for anyone. Similarly, price clubs find that they cannot meet customers' need for service. Size alone is no longer enough to sustain current organizations. Flexibility and time to delivery can yield greater competitiveness than what used to be considered economies of scale. Apple Corporation rarely reduces its prices to compete; it focuses on exceeding customer expectations and ensuring efficient service through their chain of Apple Stores and service centres.

Meeting customer needs is only a starting point. Surpassing customer expectations should be the goal of every organization. Companies need to anticipate customer needs and then supply them in a "value added" mode to ensure that they keep a competitive edge. To this end, there must be a standard of performance expected of top management: the management of value. Managers must ensure that the organization focuses on the creation of value by invigorating workers and focusing on special skills that are in line with the strategic intent of the firm. In most cases, strategically misaligned organizations lack coherence but aligned organizations are coherent in their personnel, capabilities, and attitudes. This unity helps achieve the strategic goals. Building a cohesive team requires interaction and leadership. Involvement on the part of management is crucial to achieving an organizational culture that focuses on creating value and thereby competitiveness.

Most approaches to adding value have focused on improvements internal to the organization. Value marketing and total quality management illustrate the importance of dealing with the customer. Value marketing builds on the concept that quality, service, and pricing are the key to survival. Value implies that the company is meeting customer needs and demands; however, that high quality does not mean higher prices. Value marketing ensures the customer that the product will perform as advertised and that customers will get even more than they expect. Guarantees reinforce consumer confidence and help build relationships based on the facts pertaining to the product.

Thus the customer is acknowledged as the key to achieving competitive advantage. (We have come full circle: for many years, the saying "The customer is king" stressed that the market's acceptance of products was the bottom line.) Flexible manufacturing, speedier delivery, and a greater emphasis on quality, service, pricing, and value have contributed to meeting customer expectations. An additional factor has now been added that can extend the ability of firms to increase value and better meet customer demand in order to beat the competition. Forging "strategic alliances" or "value-adding partnerships" helps to extend the firm's value-adding capability beyond the firm itself by combining the best of two or more organizations.

Partnering can be considered as an alternative to vertical integration for small companies that do not have enough capital to acquire another company. The approach entails a group of independent companies working together closely to provide goods and services along the entire value chain. For example, the McKesson Corporation, a $6.67 billion drug and health care distributor, relied on value-adding partnerships to compete with large drugstore chains. What McKesson did was to offer small, independent drugstore operators the advantages of the computer system it had developed (which no small drugstore could afford to develop on its own). By doing this, McKesson formed strong and lasting relationships with the firms in the value chain that were responsible for the final distribution of its products.

Partnering can build a viable infrastructure based on a stakeholder analysis to identify where the interdependencies exist. Value and ways to achieve it have become the key underlying elements in meeting customer needs.

Strategic Failures

Perhaps the most striking example of the impermanence of excellence can be found in the United States of America (USA) automobile industry of the 1970s. From the 1930s until the early 1970s, the largest of the USA automobile manufacturers dominated the world market. Times changed, but the USA automobile industry did not.

In a talk entitled "The Failure of Success" (O'Toole, 1985, p. 55), Professor James O'Toole of the University of Southern California attributed the USA automobile companies' downfall to their failure to re-examine and challenge ten basic assumptions that had served them well for 40 years but were no longer appropriate. He recounted the obsolete assumptions of General Motors, Ford, Chrysler, and other USA companies, to which he gave the collective name "Monolithic Motors." Their obsolete assumptions follow.

1. **Monolithic Motors is in the business of making money, not cars**. This assumption focused managers' attention on finances and cash management and diverted it from their customers' changing wants and needs and from shifts in the marketplace.

2. **Success comes not from technological leadership, but from having the resources to quickly adopt innovations successfully introduced by others**. This failure to manage technology strategically permitted the Japanese manufacturers first to gain technological parity and then to surpass the American automobile manufacturers' technological advantage.

3. **Cars are primarily status symbols. Styling is therefore more important than quality to buyers who are, after all, "trading up" every other year**. Changes in economic conditions and in individual values changed this once - salient assumption. In the 1970s, many customers began to want utility', economy, and longevity more than status; several foreign-manufactured automobiles satisfied these desires better than USA models.

4. **The American car market is isolated from the rest of the world**. Foreign competitors will never gain more than 15% of the domestic market. Today the United States is part of a global economy brought about by increased transportation, communication, and commerce. In a global society and economy, no one country can isolate itself effectively.

5. **Energy will always be cheap and abundant**. OPEC in the early 1970s ended the validity of this assumption.

6. **Workers do not have an important impact on productivity or product quality**. The prevalence of Henry Ford's great contribution, the mass-production assembly line, may have reached its limits. As the Lordstown plant's worker rebellion[1] and other, similar events indicated, workers have a great deal of influence on production, quality, and quantity. Working together with the aims of the company in mind, they can enhance performance. Working apart and against the company, they can destroy performance. Interestingly enough, the more automated the plant (the more robotics it employs), the more important worker cooperation becomes.

7. **The consumer movement does not represent the concerns of a significant portion of the American public**. Ralph Nader's book “Unsafe at Any Speed” changed this assumption. Subsequent problems with product liability and financing reinforced the need for a change in thinking.

8. **The government is the enemy. It must be fought tooth and nail every inch of the way**. This assumption became a management cop-out for the USA automobile industry: an excuse for not addressing some real concerns about safety, pollution, and performance. By making the assumption universal, the automobile industry failed to address some legitimate issues and incurred substantial legal costs.

9. **Strict, centralized financial controls are the secret to good administration**. Like so many strategic assumptions, this is a half-truth that outlived its usefulness. When Alfred Sloan brought financial controls to General Motors in the 1920s, he brought order to chaos. But by the 1970s, the controls had become masters rather than servants. The result was that innovation, creativity, and long-range thinking were stifled.

10. **Managers should be developed from the inside**. Too much inbreeding in the USA automobile industry resulted in too little vision and much complacent thinking.

The failure of the USA automobile firms to monitor and challenge these ten assumptions - in short, their failure to think strategically and to change their strategies - permitted the Japanese and others to capture USA markets and prosper in them.

The automobile manufacturers have not been alone in basing strategies on incorrect assumptions. Robert F. Hartley summarized several such failures in a book entitled “Management Mistakes” (1983). Hartley's main conclusion after studying errors in strategic management was the same as O’Toole's: Success does not guarantee continued success; indeed, it can lead to failure.

[1] In the 1970s, the factory’s 7,000 workers were so bitter toward management that thousands of Chevrolet Vegas rolled off the assembly line with slit upholstery and other damage. The hostility eventually led to a 22-day strike in 1972 that cost G.M. $150 million, and the term “Lordstown syndrome” became shorthand to describe rebellious American factory workers. http://www.nytimes.com/2010/01/06/business/06uaw.html?_r=0

Types of Strategies

Alternative strategies that an enterprise could pursue can be categorized into 13 actions - forward integration, backward integration, horizontal integration, market penetration, market development, product development, concentric diversification, conglomerate diversification, horizontal diversification, joint venture, retrenchment, divestiture, and liquidation - and a combination strategy. Each alternative strategy has countless variations. For example, market penetration can include adding salespersons, increasing advertising expenditures, couponing, and using similar actions to increase market share in a given geographic area.

Integration Strategies

Vertical integration (forward integration and backward integration) and horizontal integration are collectively referred to as integration strategies. Integration strategies allow firms to gain control over distributors, suppliers, and/or competitors.

Forward Integration

Forward integration involves gaining ownership or increased control over distributors or retailers. This can be achieved through exclusivity contracts, purchasing the distribution network, franchising, or other methods of exerting control within the distribution portion of the value chain.

Backward integration

Both manufacturers and retailers purchase needed materials from suppliers. Backward integration is a strategy of seeking ownership or increased control of a firm's suppliers. This strategy can be especially appropriate when a firm's current suppliers are unreliable, too costly, or cannot meet the firm's needs.

Global competition is spurring firms to reduce their number of suppliers and to demand higher levels of service and quality from those they keep. Although traditionally relying on many suppliers to ensure uninterrupted supplies and low prices, American firms now are following the lead of Japanese firms, which have far fewer suppliers and closer, long-term relationships with those few.

Horizontal Integration

Horizontal integration refers to a strategy of seeking ownership of or increased control over a firm's competitors. Mergers, acquisitions, and takeovers among competitors allow for increased economies of scale and enhanced transfer of resources, competencies, technologies, and qualified personnel.

Intensive Strategies

Market penetration, market development, product development, product differentiation, market segmentation, and new product introductions are sometimes referred to as intensive strategies because they require intensive efforts to improve a firm's competitive position with existing or new products.

Market Penetration

A market-penetration strategy seeks to increase market share for present products or services in present markets through greater marketing efforts. This strategy is widely used alone and in combination with other strategies. Market penetration includes increasing the number of salespersons, increasing advertising expenditures, offering extensive sales promotion items, or increasing publicity efforts.

Market Development

Market development involves introducing present products or services into new geographic areas.

Product Development

Product development is a strategy that seeks increased sales by improving or modifying present products or services or developing new ones. Product development usually entails large research and development expenditures.

Diversification Strategies

There are three general types of diversification strategies: concentric, horizontal, and conglomerate. Overall, diversification strategies are becoming less than integration strategies because it is more difficult to manage diverse business activities. In the 1960s and 1970s, the trend was to diversify so as not to be dependent on any single industry, but the 1980s saw a general reversal of that thinking.

There are however, some companies today that pride themselves on being a conglomerate such as Pepsi, Emerson Electric, Philip Morris and General Electric. Conglomerates prove that focus and diversity are not always mutually exclusive. Even Walt Disney Company competes in hotel, merchandising, television and film, theme parks, and sports.

Concentric Diversification

Adding new, but related, products or services is widely called concentric diversification.

Horizontal Diversification

Adding new, unrelated products or services for present customers is called horizontal diversification. This strategy is not as risky as conglomerate diversification because a firm already should be familiar with its present customer base.

Conglomerate Diversification

Adding new, unrelated products or services for unrelated markets is called conglomerate diversification. Some firms pursue conglomerate diversification based in part on an expectation of profits from breaking up acquired firms and selling divisions piecemeal. General Electric (GE) is an example of a firm that is highly diversified. GE makes locomotives, light bulbs, power plants, and refrigerators. GE manages more credit cards than American Express and owns more commercial aircraft than American Airlines.

Defensive Strategies

Joint Venture

Joint venture is a popular strategy that occurs when two or more companies form a temporary partnership or consortium for the purpose of capitalizing on some opportunity. This strategy is considered defensive because neither firm is undertaking the project alone. Often, the two or more sponsoring firms form a separate organization and have shared equity ownership in the new entity. Other types of cooperative arrangements include research and development partnerships, cross-distribution agreements, cross-licensing agreements, cross-manufacturing agreements, and joint-bidding consortia. Joint ventures and cooperative arrangements are being used increasingly because they allow companies to improve communications and networking, to globalize operations, and to minimize risk. Cooperative agreements between competitors are also popular.

For collaboration between competitors to succeed, both firms must contribute something distinctive, such as technology, distribution, basic research, or manufacturing capacity. However, a major risk is the unintended transfers of important skills or technology that may occur at organizational levels below where the deal was signed. Information not covered in the formal agreement often gets traded in day-to-day interactions and dealings of engineers, marketers, and product developers. Many firms often give away too much information to foreign firms when operating under cooperative agreements. In general, tight formal agreements are needed.

Retrenchment

Retrenchment occurs when an organization regroups through cost and asset reduction to reverse declining sales and profits. Retrenchment is designed to fortify an organization's basic distinctive competence. During retrenchment, strategists work with limited resources and face pressure from shareholders, employees, and the media. Retrenchment can entail selling off land and buildings to raise needed cash, pruning product lines, closing marginal businesses, closing obsolete factories, automating processes, reducing the number of employees, and instituting control systems.

Divestiture

Selling a division or part of an organization is called divestiture. Divestiture is often used to raise capital for further strategic acquisitions or investments. Divestiture can be part of an overall retrenchment strategy to rid an organization of businesses that are unprofitable, that require too much capital, or that do not fit well with the firm's other activities. Divestiture for the purpose of retrenchment has become a very popular strategy as firms try to focus on their core strengths and lessening their level of diversification.

In the USA, Chapter 11 Bankruptcy allows organizations to reorganize and come back after filing a petition for protection. Chapter 12 Bankruptcy was created by the Family Farmer Bankruptcy Act of 1986. This law became effective in 1987 and provides special relief to family farmers with debt equal to or less than $1.5 million. Chapter 13 Bankruptcy is a reorganization plan similar to Chapter 11 but available only to small businesses owned by individuals with unsecured debts of less than $100,000 and secured debts of less than $350,000. The Chapter 13 debtor is allowed to operate the business while a plan is being developed to provide for the successful operation of the business in the future.

Liquidation

Selling all of a company's assets, in parts, for their tangible worth is called liquidation. Liquidation is recognition of defeat and consequently can be an emotionally difficult strategy. However, it may be better to cease operating than to continue losing large sums of money and be forced into bankruptcy. Thousands of small businesses in the United States liquidate annually without ever making the news. It is tough to start and successfully operate a small business.

In some cases, bankruptcy is the end result. Bankruptcy can allow a firm to avoid major debt obligations and to void union contracts. There are five major types of bankruptcy in the USA: Chapter 7, Chapter 9, Chapter 11, Chapter 12, and Chapter 13.

Chapter 7 Bankruptcy is a liquidation procedure used only when a corporation sees no hope of being able to operate successfully or to obtain the necessary creditor agreements. All the organization's assets are sold in parts for their tangible worth. Chapter 9 Bankruptcy applies to municipalities.

Combination

Many, if not most, organizations pursue a combination of two or more strategies simultaneously, but a combination strategy can be exceptionally risky. No organization can afford to pursue all the strategies that might benefit the firm. Difficult decisions must be made. Priorities must be established based on limited resources and the ability to manage. Organizations cannot do too many things at the same time because resources and talents get spread thin and competitors gain advantage. In large diversified companies, a combination strategy is commonly employed when different divisions pursue different strategies.

Guidelines for Pursuing Strategies

The following points outline possible situations where each of the above strategic thrusts may be used. This is not a comprehensive list, but merely an attempt at giving the reader some basic guidelines.

Forward Integration

- When an organization's distributors are especially expensive, or unreliable, or incapable of meeting the firm's distribution needs.
- When the availability of quality distributors is so limited as to offer a competitive advantage to those firms that integrate forward.
- When an organization competes in an industry that is growing and is expected to continue to grow markedly; this is a factor because forward integration reduces an organization's ability to diversify if its basic industry falters.
- When an organization has both the capital and human resources needed to manage the new business of distributing its own products.
- When the advantages of stable production are particularly high: this is a consideration because an organization can increase the predictability of the demand for its output through forward integration.
- When distributors or retailers have high profit margins: this situation suggests that a company profitably could distribute its own products and price them more competitively by integrating forward.

Backward Integration

- When an organization's suppliers are especially expensive, or unreliable, or incapable of meeting the firm's needs for parts, components, assemblies, or raw materials.
- When the number of suppliers is small and the number of competitors is large.
- When an organization competes in an industry that is growing rapidly: this is a factor because integrative-type strategies (forward, backward, and horizontal) reduce an organization's ability to diversify in a declining industry.
- When an organization has both capital and human resources to manage the new business of supplying its own raw materials.

- When the advantages of stable prices are particularly important: this is a factor because an organization can stabilize the cost of its raw materials and the associated price of its product through backward integration.
- When supplies have high profit margins, which suggests that the business of supplying products or services in the given industry is a worthwhile venture.
- When an organization needs to acquire a needed resource quickly.

Horizontal Integration

- When an organization can gain monopolistic characteristics in a particular area or region without being challenged by the federal government for "intending substantially" to reduce competition.
- When an organization competes in a growing industry.
- When increased economies of scale provide major competitive advantages.
- When an organization has both the capital and human talent needed to successfully manage an expanded organization.
- When competitors are faltering due to a lack of managerial expertise or a need for particular resources that an organization possesses: note that horizontal integration would not be appropriate if competitors are doing poorly because overall industry sales are declining.
- When the only way to gain market share quickly is to buy the competition.

Market Penetration

- When current markets are not saturated with a particular product or service
- When the usage rate of present customers could be increased significantly.
- When the market shares of major competitors have been declining while total industry sales have been increasing.
- When the correlation between euro sales and euro marketing expenditures historically has been high.
- When increased economies of scale provide major competitive advantages.

Market Development

- When new channels of distribution are available that are reliable, inexpensive, and of good quality.
- When an organization is very successful at what it does.
- When new untapped or unsaturated markets exist.
- When an organization has the needed access to capital and human resources to manage expanded operations.
- When an organization has excess production capacity.
- When an organization's basic industry is rapidly becoming global in scope.

Product Development

- When an organization has successful products that are in the maturity stage of the product life cycle: the idea here is to attract satisfied customers to try new or improved products as a result of their positive experience with the organization's present products or services.

- When an organization competes in an industry that is characterized by rapid technological developments.
- When major competitors offer better-quality products at comparable prices.
- When an organization competes in a high-growth industry.
- When an organization has especially strong research and development capabilities.

Concentric Diversification

- When an organization competes in a no-growth or a slow-growth industry.
- When adding new, related products would significantly enhance the sales of current products or generate similar profits.
- When new, related products could be offered at highly competitive prices.
- When new, related products have seasonal sales levels that counterbalance an organization's existing peaks and valleys.
- When an organization's products are currently in the decline stage of the product life cycle.
- When an organization has a strong management team.

Conglomerate Diversification

- When an organization's basic industry is experiencing declining annual sales and profits.
- When an organization has the capital and managerial talent needed to compete successfully in a new industry.
- When an organization has the opportunity to purchase an unrelated business that is an attractive investment opportunity.
- When there exists financial synergy between the acquired and acquiring firm: note that a key difference between concentric and conglomerate diversification is that the former should be based on some commonality in markets, products, or technology whereas the latter should be based more on profit considerations.
- When existing markets for an organization's present products are saturated.
- When antitrust action could be charged against an organization that historically has concentrated on a single industry.

Horizontal Diversification

- When revenues derived from an organization's current products or services would increase significantly by adding the new, unrelated products.
- When an organization competes in a highly competitive and/or a no-growth industry, as indicated by low industry profit margins and returns.
- When an organization's present channels of distribution can be used to market the new products to current customers.
- When the new products have counter-cyclical sales patterns compared to an organization's present products.

Joint Venture

- When a privately owned organization is forming a joint venture with a publicly owned organization: there are some advantages of being privately held, such as close ownership:

there are some advantages of being publicly held, such as access to stock issuances as a source of capital. Sometimes, the unique advantages of being privately and publicly held can be synergistically combined in a joint venture.

- When a domestic organization is forming a joint venture with a foreign company: a joint venture can provide a domestic company with the opportunity for obtaining local management in a foreign country, thereby reducing risks such as expropriation and harassment by host country officials.
- When the distinctive competencies of two or more firms complement each other especially well.
- When some project is potentially very profitable, but requires overwhelming resources and risks.
- When two or more smaller firms have trouble competing with a large firm.
- When there exists a need to introduce a new technology quickly.

Retrenchment

- When an organization has a clearly distinctive competence, but has failed to consistently meet its objectives and goals over time.
- When an organization is one of the weaker competitors in a given industry
- When an organization is plagued by inefficiency, low profitability, poor employee morale, and pressure from stockholders to improve performance.
- When an organization has failed to capitalize on external opportunities, minimize external threats, take advantage of internal strengths, and overcome internal weaknesses over time: that is, when the organization's strategic managers have failed (and possibly will be replaced by more competent individuals).
- When an organization has grown so large so quickly that major internal reorganization is needed.

Divestiture

- When an organization has pursued a retrenchment strategy and it failed to accomplish needed improvements.
- When a division or divisions need more resources to be competitive than the company can provide.
- When a division or divisions are responsible for an organization's overall poor performance.
- When a division is a misfit with the rest of an organization: this can result from radically different markets, customers, managers, employees, values, or needs.
- When a large amount of cash is needed quickly and cannot be obtained from other sources.
- When government antitrust action threatens an organization.

Liquidation

- When an organization has pursued both a retrenchment strategy and a divestiture strategy, and neither has been successful.
- When an organization's only alternative is bankruptcy: liquidation represents an orderly and planned means of obtaining the greatest possible cash for an organization's assets. A company can legally declare bankruptcy first and then liquidate various divisions to raise needed capital.

- When the stockholders of a firm can minimize their losses by selling the organization's assets.

Mergers and Leveraged Buyouts

Acquisition and merger are two commonly used ways to pursue strategies. An acquisition occurs when a large organization purchases (acquires) a smaller firm, or vice versa. A merger occurs when two organizations of about equal size unite to form one enterprise. When both parties do not desire an acquisition or merger, it can be called a takeover or hostile takeover. Among mergers, acquisitions, and takeovers, same-industry combinations predominate. Many are driven by general market consolidation.

There are many reasons for mergers and acquisitions, some of these reasons are listed below:

- To provide improved capacity utilization.
- To make better use of existing sales force.
- To reduce managerial staff.
- To gain economies of scale.
- To smooth out seasonal trends in sales.
- To gain access to new suppliers, distributors, customers, products, and creditors.
- To gain new technology.
- To reduce tax obligations.

A leveraged buyout (LBO) occurs when a corporation's shareholders are bought out (hence buyout) by the company's management and other private investors using borrowed funds (hence leveraged). Besides trying to avoid a hostile takeover, other reasons for initiating an LBO are; senior management decisions that particular divisions do not fit into an overall corporate strategy or must be sold to raise cash, or receipt of an attractive offering price. An LBO takes a corporation private.

Porter’s Generic Strategies

Probably the three most widely read books on competitive analysis in the 1980s were Michael Porter's Competitive Strategy (Free Press. 1980), Competitive Advantage (Free Press. 1985), and Competitive Advantage of Nations (Free Press, 1989). According to Porter, strategies allow organizations to gain competitive advantage from three different bases: cost leadership, differentiation, and focus. Porter calls these bases generic strategies. Cost leadership emphasizes producing standardized products at very low per-unit cost for consumers who are price-sensitive. Differentiation is a strategy aimed at producing products and services considered unique industry wide and directed at consumers who are relatively price-insensitive. Focus means producing products and services that fulfil the needs of small groups of consumers.

Porter's strategies imply different organizational arrangements, control procedures, and incentive systems. Larger firms with greater access to resources typically compete on a cost leadership and/or differentiation basis, whereas smaller firms often compete on a focus basis.

Porter stresses the need for strategists to perform cost-benefit analysis to evaluate "sharing opportunities" among a firm's existing and potential business units. Sharing activities and resources enhances competitive advantage by lowering costs or raising differentiation. In addition to prompting sharing, Porter stresses the need for firms to "transfer" skills and expertise among autonomous business units effectively in order to gain competitive advantage. Depending upon factors such as type of industry, size of firm, and nature of competition, various strategies could yield advantages in cost leadership, differentiation, and focus.

Cost Leadership Strategies

A primary reason for pursuing forward, backward, and horizontal integration strategies is to gain cost leadership benefits. But cost leadership generally must be pursued in conjunction with differentiation. A number of cost elements affect the relative attractiveness of generic strategies, including economies or diseconomies of scale achieved, learning and experience curve effects, the percentage of capacity utilization achieved, and linkages with suppliers and distributors. Other cost elements to consider in choosing among alternative strategies include the potential for sharing costs and knowledge within the organization. R&D costs associated with new product development or modification of existing products, labour costs, tax rates, energy costs, and shipping costs.

Striving to be the low-cost producer in an industry can be especially effective when the market is composed of many price-sensitive buyers, when there are few ways to achieve product differentiation, when buyers do not care much about differences from brand to brand, or when there are a large number of buyers with significant bargaining power. The basic idea is to under-price competitors and thereby gain market share and sales, driving some competitors out of the market entirely (shakeout).

A successful cost leadership strategy usually permeates the entire firm, as evident by high efficiency, low overhead, limited perks, intolerance of waste, intensive screening of budget requests, wide spans of control, rewards linked to cost containment, and broad employee participation in cost control efforts. Some risks of pursuing cost leadership are that competitors may imitate the strategy, thus driving overall industry profits down, technological breakthroughs in the industry may make the strategy ineffective, or buyer interest may swing to other differentiating features besides price. Several example firms that are well known for their low-cost leadership strategies are Wal-Mart, McDonald's, Black and Decker, and Briggs and Stratum.

Differentiation Strategies

Different strategies offer different degrees of differentiation. Differentiation does not guarantee competitive advantage, especially if standard products sufficiently meet customer needs or if rapid imitation by competitors is possible. Durable products protected by barriers to quick copying by competitors, are best. Product development is an example of a strategy that offers the advantages of differentiation.

A differentiation strategy should be pursued only after careful study of buyers' needs and preferences to determine the feasibility of incorporating one or more differentiating features into a unique product that features the desired attributes. A successful differentiation strategy allows a firm to charge a higher price for its product and to gain customer loyalty because consumers may become strongly attached to the differentiation features. Special features to differentiate one's product can include superior service, spare parts availability, engineering design, product performance, useful life, gas mileage, or ease of use.

A risk of pursuing a differentiation strategy is that the unique product may not be valued highly enough by customers to justify the higher price. When this happens, a cost leadership strategy will easily defeat a differentiation strategy. Another risk of pursuing a differentiation strategy is that competitors may develop ways to copy the differentiating features quickly. Firms must find durable sources of uniqueness that cannot be imitated quickly or cheaply by rival firms.

Common organizational requirements for a successful differentiation strategy include strong coordination among the research and development (R&D) and marketing functions and substantial amenities to attract scientists and creative people. Firms pursuing a differentiation strategy include Apple, Geometric Harmony Speakers, Ben & Jerry's, Ferrari, and Ralph Lauren.

Focus Strategies

A successful focus strategy depends upon an industry segment that is of sufficient size, has good growth potential, and is not crucial to the success of other major competitors. Strategies such as market penetration and market development offer substantial focusing advantages. Midsize and large firms can effectively pursue focus-based strategies only in conjunction with differentiation or cost leadership based strategies. All firms in essence follow a differentiated strategy because only one firm can differentiate itself with the lowest cost; the remaining firms in the industry must find other ways to differentiate their products.

Focus strategies are most effective when consumers have distinctive preferences or requirements and when rival firms are not attempting to specialize in the same target segment. Firms pursuing a focus strategy include Midas, Starbucks, the local Chinese food restaurant, and the local health food store.

Risks of pursuing a focus strategy include the possibility that numerous competitors recognize the successful focus strategy and copy the strategy, or that consumer preferences drift toward the product attributes desired by the market as a whole. An organization using a focus strategy may concentrate on a particular group of customers, geographic markets, or product line segments in order to serve a well-defined but narrow market better than competitors who service a broader market.

The Value Chain

According to Porter, the business of a firm can best be described as a value chain in which total revenues minus total costs of all activities undertaken to develop and market a product or service yields value. All firms in a given industry have a similar value chain, which includes activities such as obtaining raw materials, designing products, building manufacturing facilities, developing cooperative agreements, and providing customer service. A firm will be profitable as long as total revenues exceed the total costs incurred in creating and delivering the product or service. Firms should strive to understand their own value chain operations as well as their competitors', suppliers', and distributors' value chains. End to end business process mapping can allow firms to determine where value is added or lost in the internal portion of the value chain.

The Competitive Advantage of Nations

Countries around the world have certain elements that give them a competitive advantage in certain areas. Brazil and Canada offer abundant natural resources, Mexico offers low cost labour, and Japan offers a high commitment to education, the United States offers innovativeness and entrepreneurship. Countries differ in what they have to offer businesses, and firms are increasingly relocating various parts of their value chain operations to take advantage of what different countries have to offer.

Porter believes that some countries seem to have a disproportionate share of successful firms in particular industries. Examples are the United States in entertainment, Italy in ceramic tile, Sweden in trucks, Japan in banking, Switzerland in candy, and Germany in cars. Porter attributes these differences to four decisive elements:

- Availability of strengths in certain narrow, technical fields.
- High demand in the home country.
- Related and supporting industries in the home country.
- Strong domestic rivals.

Local rivalry, for example, often stimulates growth in local distributors and suppliers. Organizations should strive to pursue strategies that effectively enable the firm to capitalize on the relative strengths of various nations.

Strategy Formulation

The strategy formulation phase of strategic management is made up of three components; the External Assessment, the Internal Assessment and the Matching/Selection stage.

The External Assessment

Organizations can be compared to ecological entities that have mutual relations with other entities in their environment. Like any ecosystem, an organization's environment holds opportunities and threats. Skilful strategic managers find in the firm's environment "market niches” that are particularly well suited to the products, services, and capabilities the organization has to offer. Failure to find a suitable niche leads the organization to encounter elements that can cause harm or even destruction. Successful strategic planning, therefore, requires a careful assessment of the external environment. Environmental assessment enables the organization to: (1) find the best possible niche, and (2) decide how it would respond to a range of environmental conditions that might occur in the future. Environmental assessment is a never-ending task for most firms because the environment is continuously changing.

Conducting an environmental assessment involves several different but interconnected layers. As a start it is typically useful to conduct an environmental scan as a general overview. Environmental scanning is a method of identifying the economic, political, social, technological, competitive, and geographic factors that have an impact on the firm and then assessing their potential as opportunities or threats.

Strategic segmentation is essential in visualizing the competitive arena. The goal of strategic segmentation is to convert differences from competitors into a sustainable competitive advantage for the company. Understanding the different competitive environments and the forces driving an industry is essential in this process.

For most large companies today, global management is mandatory. It is also becoming increasingly important to medium-sized and smaller companies, as countries around the world grow more closely linked culturally and economically. Entering foreign markets carries both significant opportunities and risks. Careful assessment of the international environment can be the basis for superior performance abroad.

Increasingly, companies are turning to environmental forecasting as a means of determining what strategies are needed to meet competitor actions. Forecasting can be based on an analysis of such environmental data such as government or industry reports, industry trend analysis, competitor intelligence analysis, Delphi projections, or statistical analysis for predicting outcomes. Forecasting provides a basis for determining whether the courses of action under consideration will achieve the firm's goals and objectives.

An important forecasting approach that is fairly direct and has produced valuable results is scenario writing. This approach can utilize the expertise needed for a Delphi analysis or the knowledge of strategic planners who can project the likelihood of various outcomes. A number of approaches can be used to develop scenarios.

Environmental Scanning

The external environment of an organization is defined by the set of forces with which that organization interacts. External forces include all kinds of stakeholders, economic trends, unforeseen events or crises, and various regulatory policies and laws. Environmental scanning is the first step in finding and analysing external threats and opportunities. At this early stage in the strategic management process, managers need to identify all general events and trends that could be pertinent to the company's performance in the future.

Experience shows that environmental scanning is most productive when it consists of a brainstorming session by a group. Group sessions often result in a heightened awareness of reasons for strategic revisions or insights about future development. During the scanning session, managers try to identify environmental factors relevant to the following six key areas:

1. **Economics:** Factors related to the flow of money, goods and services, information, and energy.
2. **Politics:** Factors related to the use or allocation of power among people, including dealings with local and foreign governments.
3. **Social trends and demographics:** Factors that affect the way people live, including what they value.
4. **Technology:** Factors related to the development of machines, tools, processes, materials, other equipment, and know-how.
5. **Competition:** Factors that involve actions taken by current and potential competitors, market share, and concentration of competitors.
6. **Geography:** Factors related to location, space, topography, climate, and natural resources.

Scanning these six key areas reveals most of the environmental factors that need to be considered. Sometimes, however, managers find it useful to add another key area, such as the military, education, the law, medicine, the government, or religion.

Industry Analysis

An industry analysis includes an environmental scan to determine what forces external to the organization have a direct impact on its competitive position and what competitive actions need to be taken to achieve a sustainable competitive advantage. An industry analysis also helps determine what competitors are doing, what threats and opportunities exist, and whether the company should enter, remain in, or exit from an industry.

Determining in which industry a company fits can be a difficult task, because many companies are in several industries. It is often appropriate to begin an industry analysis by considering the "core" competency of the business that is its major source of income or by considering a specific Strategic

Business Unit (SBU). In the USA one can examine the Standard Industrial Classification (SIC) code or the North American Industry Classification System (NAICS); however, any conclusions based solely on the SIC or NAICS code can be misleading if no additional information is used (such as what products are dominant in a given industry, what markets are served, and what percentage of the company's total sales are derived in a given industry classification). Nonetheless, both are a useful reference point because all companies are confronted with these same limitations. Where possible, industries are grouped by location, size, profitability, growth, or other factors that contribute to the direct or indirect competitive environment.

After an industry has been classified, it is useful to explore the strategic groups in that industry. This analysis includes those companies that compete in a given industry and how they affect the subject company's competitive ability. For example, although Apple Corporation was a computer company, it certainly carved out a market for itself in the Smartphone industry. Strategic groups can be found for most segments within an industry. Porter (1980), for example, looks at strategic groups as those companies that contribute to rivalry in an industry because of price, quality, product differentiation, overall size, market share, or willingness to take risks. The ease with which it is possible to enter or leave a group depends on the structure of the industry, which includes barriers to entry, maturity of the industry, cost structure, technology, product differentiation, and mobility of the company.

Within a group, the relative percentage of market share can be shown for each company in that group. Using this approach for each of the groups, one can determine which companies are the major competitors within an industry and within a group. Developing an effective strategy depends on knowing who the competitors are and their strengths.

Industry forces strongly influence what strategies are viable and whether the industry has growth potential or profit potential. Some of the major questions Porter (1980) believes are important to consider when examining an industry are:

1. Is the industry fragmented, concentrated, mature, or declining? The restaurant industry is highly fragmented, whereas the automotive industry is highly concentrated. Steel has been both a mature and a declining industry.

2. How strong are competitors, what are their weaknesses, and how willing are they to compete vigorously? Philip Morris had considerable financial strength, but for many years it lacked technical know-how in industries such as wine making and eventually divested itself of its wine holdings.

3. How important is technology and how readily available is it? Does the industry have the infrastructure to sustain its differentiation against substitute technologies? The electronics industry, which includes a number of large companies, has suffered both from the need for new technology and from the proliferation of substitute products, especially tablets and Smartphones.

4. What are the resources required to function effectively in the industry? Is it capital-intensive? Is there an adequate supply of skilled labour or technical and managerial personnel? Is the industry attractive to the financial community? Junk bonds and unsecured leverage played havoc with banks, insurance companies, and stock brokerage houses because people relied on value that did not exist.

5. What are the long and short-term trends in the industry? Are significant demographic changes taking place? Are suppliers and distributors reliable, and is their use cost-effective? What is the impact of global competition on the industry? Over the past 14 years, economic turmoil has had a serious impact on consumer spending cycles, employment rates, housing values,

energy prices and company valuations. This has had a direct impact on companies that make consumer products and has also affected those that depend indirectly on consumer spending. Global competition is increasingly becoming a major factor in most industries. Many low cost labour nations are moving from economies based on subcontract manufacturing to low cost, locally designed product substitutes. China and Taiwan are examples.

6. What are the potential regulatory effects, especially in terms of pollution, labour, and restrictions on plant location or operation? Are significant laws pending that would affect the industry? Is the industry subject to litigation, such as in health care or product liability? Is there an adequate legal framework in place to protect intellectual property rights?

7. What are customer expectations and needs? Do customers have significant power, are changes in buying practices under way, are customers subject to brand switching, and how price-elastic is the demand for the industry's products? Customers increasingly expect quality, service, timeliness, and performance, all of which contribute to what we call a product's value.

8. What are the channels for distribution of the products? Are needed services readily available? Is timing critical for delivery, and must inventory be kept on hand? What level of advertising and promotion is normal for the industry? Joint ventures, strategic alliances, and industry consortiums are becoming important ways to compete in today's turbulent environment.

9. Is the industry cyclic or seasonal in nature, or is demand predictable? Is there considerable uncertainty regarding the future of the industry? Is extensive R&D needed to maintain a technological edge?

10. How is value added to products produced by the industry? Can cost be contained? Are mergers and acquisitions a problem? How vulnerable are companies in the industry to such takeovers?

Strategic Segmentation within an Industry

Strategic managers must consider the full range of environments in which they might compete and the entire economic spectrum of a business activity, including suppliers, operations and production technology, distribution, marketing and sales, customer service, and so on. Only then can they identify strategic segments, or business activities, through which the company can:

1. Establish an advantage relative to the competition;
2. Defend this advantage over time; and
3. Enjoy secure and stable profitability

The key question in strategic segmentation is "In which parts of the industry can the company expect the highest long-term returns?" In other words, within which segments will it be possible for the company to develop a sustainable advantage relative to competitors in other, possibly adjacent, segments and deny competitors attractive returns on any investments required to enter the chosen segment?

The most important characteristic of a strategic segment is its defensibility. Proof that a segment exists is the barriers to competition that surround it. The higher these barriers, the higher the profit potential in that segment. Barriers can include:

- Capital investment (such as the need for specialized equipment or a large-scale facility),
- Location (proximity to natural resources, for example, or transport-cost advantages for

customers),

- Proprietary technological expertise and patents,
- Established consumer franchise/trading relationships,
- Tariffs and other trade barriers, and
- Barriers can lead to a cost advantage, because of manufacturing, marketing, distribution, or a combination thereof.

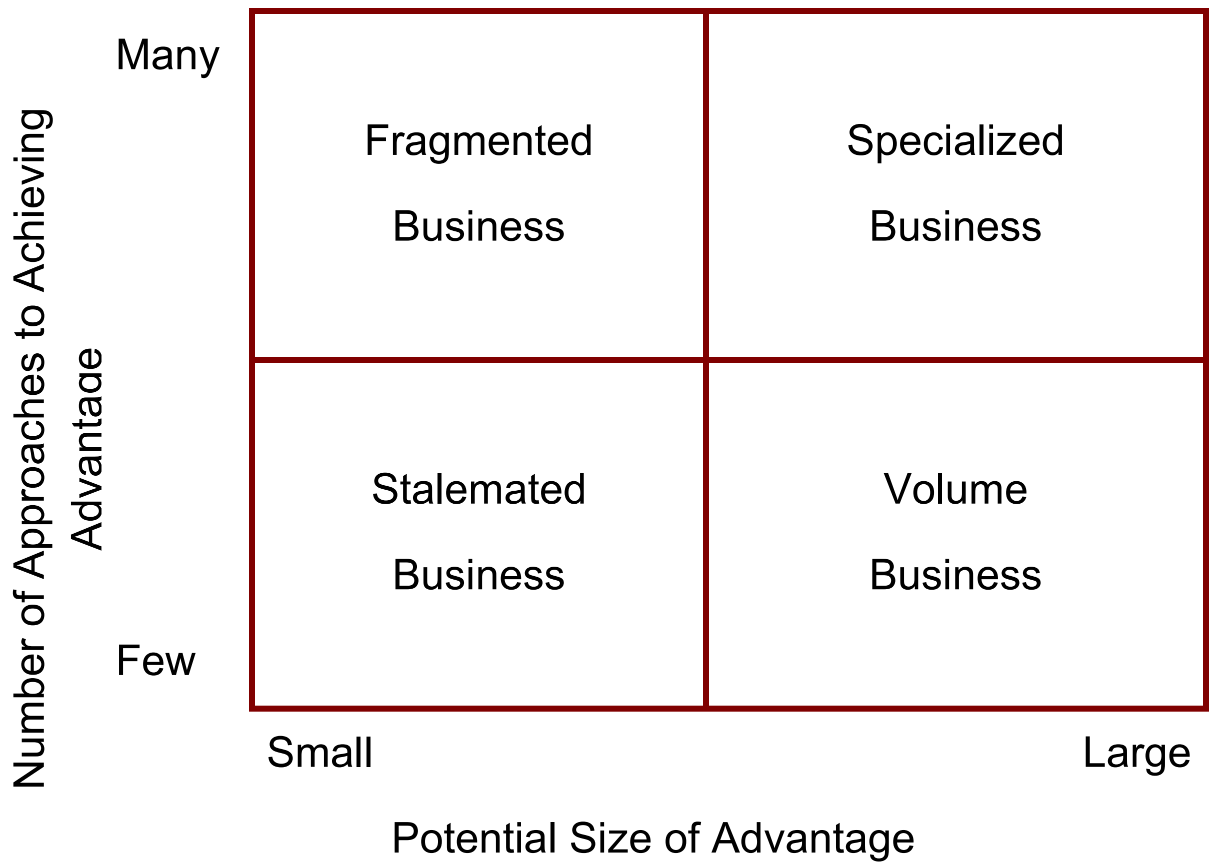
Strategic segmentation occurs at a more general level than market segmentation and involves decisions about production technology or capabilities that entail long-term investment decisions. A strategic segment in the paper industry can be identified in terms of primary raw material; wood pulp versus wood pulp free, and primary production process; uncoated versus coated. Market segments are identified by subdividing a strategic segment, such as art bond paper, on the basis of one or more product characteristics, such as quality, price, or weight.

Let's pursue a bit further the example of selecting a primary raw material for the production of paper. Wood free papers, which are made from chemical pulps, require a completely different technology and production process from those made from wood pulp. The decision to produce paper leads to considerable capital investments. Besides the paper machine, which can cost up to $500 million, coating equipment must be purchased. The choice of the strategic segment can have a direct impact on which specific market segments can be served. Typically, a paper machine is built to produce a narrow range of paperweight. To switch to another range of weights requires that the firm rebuild existing equipment, incurring significantly higher capital costs. Coating can be done either by on-machine coaters, which are cheaper but produce lower-quality papers, or by off-machine coaters, which are more expensive but produce higher-quality papers. Therefore, the choice of machine (if that choice has already been made) determines which strategic segment the company should seek to compete in. These capital-investment decisions narrow down the number of market segments that are attractive for the company. For each market segment, further product differentiation can be pursued; for example, the company can choose to produce rolls or sheets and can choose to distribute the paper directly or through dealers.

The choice of what product to offer can also dictate in what region a paper company competes. Success in selling bulk papers, such as most wood pulp grades, is heavily dependent on making the right choice of location on a worldwide basis, as well as on a favourable exchange rate. North American producers of newsprint, for example, enjoy a very favourable cost situation, especially when the value of the dollar is low relative to that of other currencies such as the Euro. During this time they can make substantial inroads into Europe and other parts of the world. Consequently, all the major paper producers of these grades of papers are pursuing global strategies. Other specialty papers tend to be more domestic or regional in nature. For example, writing papers are typically regional products, because they depend more on regional standards and distribution strength than on lowest production cost.

Initial profitability does not ensure that a company has defined a strategic segment correctly. Above-average profits in an area may or may not validate the existence of a strategic segment. Profits do not guarantee that the segment is defensible or that profitability can be maintained. Many companies have found that short-term concentration on areas with above-average profitability can lead to long-term organizational decline. One such example is the motorcycle industry in the United Kingdom and the United States. In the late 1960s, these countries were the major producers of large motorcycles. The Japanese at that time produced small motorcycles. At this stage, manufacturers in both the United States and the United Kingdom apparently decided that "super bikes" (bikes with engine capacity greater than 500 cc) were a valid strategic segment exclusive of smaller bikes. Therefore, they abandoned the "small-bike segment" to the Japanese. This assumption about market segmentation was wrong. There were, in fact, no real barriers separating the design, production, marketing, and distribution of large and small motorcycles. The Japanese were allowed to dominate the small-bike market and, while doing so, were able to build a considerable competitive advantage in all motorcycle categories. A similar phenomenon occurred in the machine tool industry when USA companies abandoned their markets for smaller, numerically controlled lathes and machining centres to the Japanese. As a result, the USA machine tool industry was been almost obliterated.

Competitive Advantage Matrix



In the 1970s, the Boston Consulting Group (BCG) developed the competitive advantage matrix, a useful first screen for identifying strategic segments. In this matrix four generic competitive environments are defined on the basis of (1) the potential size of the advantage that can be gained by a competitor and (2) the number of different means by which a competitor can establish leadership in the industry. For commodities, which have little potential for product differentiation, the basic segment boundary is the cost advantage to be gained by serving more than one market segment, or class of customers. For differentiated products, the segment boundary lies in the combination of features built into the product and their cost/price ratio. In identifying segments with the advantage matrix, managers also include all conditions of the transaction process, such as service, vendor reliability, and delivery schedules. The competitive environments identified in the advantage matrix are described in the sections that follow.

Volume Businesses

In volume businesses basic or inherent costs are the largest part of the cost structure, and economies of scale or experience reduce costs. Examples of volume businesses include television sets, mid-sized cars, newspapers, and fast-food chains. A key strategy of a volume business is to be the cost and volume leader. Low costs and high sales volumes are two means of attaining competitive advantage. Followers survive only if the leader chooses to establish a price umbrella or if the business stalemates. Major threats to a volume leader are inadequate capacity for expansion relative to market growth (resulting in loss of market share), market maturation and differentiation, cost increases due to complexity, global competition, and technology stalemate.

Stalemated Businesses

Stalemated businesses differ from volume businesses in that economies of scale do not have great cost benefits, often because technology and experience have stagnated throughout the industry and are widely shared among competitors. Examples of stalemated businesses include the steel, aluminium, shipbuilding, and paper industries. In these businesses, the cost advantages of high volume have shrunk, and establishment of a leadership position depends mostly on reducing factor costs, such as the costs of labour, energy, and capital. To reduce labour costs, many stalemated businesses move their manufacturing operations to newly industrialized countries, such as South Korea, Taiwan, or Brazil. Businesses that are sheltered by government subsidies can keep their domestic plants open, at least for a period of time.

Specialized Businesses

Specialized businesses are characterized by steep scale or experience effects in costs incurred by serving a specific market segment. They focus on a limited set of customers, or a “segment” of the market. Examples of specialized businesses include pharmaceuticals, cosmetics, book publishing, and luxury cars. By focusing on a selected part of the market, it may be possible to achieve significant price premiums, and a higher-than-normal price for a product. The main success factors for specialized businesses are market focus and segment leadership. Typically there are several highly profitable competitors, but each dominates a different market segment. Followers in each specific segment tend to be less profitable. Competitive battles are usually not head-on but rather tend to occur at strategic and market segment boundaries. It is also possible for a competitor to serve more than one market segment, which significantly lowers average costs. For a firm to do this, however, it must be possible to sell at different prices to each market segment, and the price in each segment must match value to the customer. One example was the entry of Japanese car manufacturers into the luxury car segment once dominated by Europeans.

Fragmented Businesses

The profitability of fragmented businesses is unrelated to size and strategic segmentation. Fragmented businesses are often regional businesses in which economies of scale are outweighed by the costs of complexity. Examples of such businesses include restaurants, engineering companies, handicrafts, and consulting firms. Competitive advantage can be sustained by innovation, operational efficiency, and market focus that is value-oriented. These factors are more important than relative competitive position in an industry that no one dominates.

Porter (1980) recommends a number of approaches for coping with fragmentation. First is to attempt an economic consolidation through franchising or mergers. He also advocates strategic segmentation that focuses on the customer, type of product, geographic location, or uniqueness of design. In addition, he recommends creating industry standards that make fragmented industries much more efficient because of their ability to reduce cost and to focus on value-added activities. Relying on a strategic discipline, a company can focus its efforts even within a highly fragmented industry.

Competitive Environment Analysis (CEA)

Strategic segmentation proceeds from identification of valid market segments and their competitive environments to a detailed analysis of the industry's competitive structure. Hence, moving outward in the levels of the economic environment we find the next critical area that a strategic manager must assess: the industry in which the organization finds itself. One of the most comprehensive studies of the competitive environment in which a company operates was done by Porter (1980, 1985). His analysis will be covered in two parts. We will examine the impact of competition in an industry and some ways of dealing with industry evolution, fragmented industries, and strategic groups within an industry. Then we will present a means of assessing the attractiveness of a given industry. As is often the case, not all companies follow neat economic theory. Thus the guidelines described by Porter should be considered a useful overview, but they should be supplemented with other approaches. First we will examine the competitive forces in an industry using Porter's analysis. We will then use another approach called an "Industry Attractiveness Analysis (IAA)" to determine whether to enter or exit an industry.

PORTER'S ANALYSIS

According to Michael Porter, the key to competitive analysis is to identify the major competitive forces and assess their impact on the company's present and future market position. In particular, he singles out:

- Potential rate of growth in the industry
- Threat of entry by new competitors
- Intensity of rivalry among existing competitors
- Pressure from substitute products
- Dependence on complementary products and services
- Bargaining power of buyers
- Bargaining power of suppliers
- Sophistication of technologies applied in the industry
- Rate of innovation
- Capability of management

These ten factors are discussed in the sections that follow. By analysing them, managers are better able to formulate strategies that have a high likelihood of success given the nature of the industry's competitive environment. Some of the other benefits of doing a CEA is that the results can help managers to determine where the industry is positioned in its life cycle, what critical factors influence the industry, and what types of competitors may enter the industry in the future.

Potential Rate of Growth

Strategic managers must first assess the industry's growth potential, because this potential determines the nature of the game to be played. Industries with low growth rates (under 6% per annum) present few opportunities for new firms but enable established firms to maintain profitability if they can protect their position. Modest growth rates (6-12% per annum) present opportunities for aggressive firms. High growth rates (over 12%) present substantial opportunities, but they attract large numbers of new competitors and require that most competitors make substantial capital investments to keep pace.

Threats of Entry

Under what conditions will a new competitor enter a firm's strategic segment? What can the firm do about it? In general, a new competitor will not enter a strategic or market segment if the barriers to entry are high and a strong competitive reaction can be expected from existing firms. As mentioned earlier, one of the most important barriers to entry is capital requirements. The more money and resources needed to start up a new business (that is, the higher the "ante"), the less likely it is that a new competitor will want to enter. In clothing manufacturing, for example, there are few barriers for new-apparel makers, some of whom use undocumented workers in "sweat shops" to achieve a cost advantage. The manufacture of fine textile designer clothes, on the other hand, requires considerably more capital investment and know-how.

Another barrier is the ability of established companies to practice economies of scale. As a firm's volume increases and it gains more experience, its costs tend to decrease. And, of course, it takes a certain volume of sales to cover fixed costs and to begin to return a profit on each sale. These factors give established firms a distinct cost advantage over new competitors.

Barriers to entry can also consist of exclusive access to patents, information, or raw materials; a preferred location; or superior facilities. Product differentiation, such as unique automobile styling, serves as a barrier for a company's market segments. Product differentiation also tends to give the established firm the advantages of brand identification and customer loyalty. This advantage is often gained by means of advertising, good quality, and service.

For some types of customers, the switching costs (the costs of changing from one product to another) serve as protective barriers. For example, home heating systems. Converting a home heating system from fuel oil to geothermal or solar is an expensive proposition for any homeowner. This makes it difficult for heat pump manufacturers to sell their products without government incentives.

Intensity of Rivalry

Many factors account for the intensity of rivalry among existing competitors in an industry. The first factor is the number of existing competitors. In general, the more competitors, the greater the rivalry. The second factor is similarity among competitors. The more nearly equivalent the competitors' size, skills, and market power, the greater the rivalry tends to be. The third factor is barriers to exit. If it is difficult for firms to leave the industry, they tend to see no options but to "fight it out" within the industry, thereby increasing the intensity of rivalry. Fourth, as industry growth stalemates or declines, the pressure on each firm to maintain its market share gets higher. Added to all of these factors is that magical ingredient, personal commitment to being number one. Some people and the companies they manage are simply more determined to succeed than others. In some cases, intense competitiveness results from a determination to enter and defend a strategic or market segment. In others, it is generated by the aggressive personality of the firm's leader.

In analysing the intensity of competition, strategic managers should determine whether competitors are:

- Numerous
- Similarly positioned in the industry
- Unable to leave the industry
- In an industry that is stalemated or declining
- Extremely committed to a strategy or to an aggressive leader

In general, the more intense the competition in an industry, the more difficult it is for new firms to enter and for existing firms to survive.

Pressure from Substitute Products

Sometimes an industry is "hit from its blind side." This happened in clothing manufacturing as synthetic fibres substituted for cotton fibres, in the computer industry as Tablets substituted for desktops or laptops, and in the camera industry where Smartphones and Tablets substituted for pocket cameras.

Product substitution follows a typical pattern. While the established firms concentrate on each other, another firm, usually by means of technological innovation, creates a product that can be substituted for the existing product. The new product has a different form but performs the same function. To prevent being surprised by a substitute product, strategic managers must continuously assess the external environment. Environmental scanning, technological assessment, and stakeholder analysis are all viable methods.

In general, the greater the pressure from substitute products, the less attractive the industry.

Dependence on Complementary Products and Services

Some products, such as candy bars, are consumed independently of other products. Others have either a correlated demand or a derived demand. Correlated demand for a product is due to the fact that customers prefer to consume certain products together, such as meat and potatoes or recreation and food. Derived demand for a product is due to the fact that the purchase of one product creates demand for another product. The sale of an automobile, for example, leads to a demand for accessories, an audio system, gasoline and oil, repair services, replacement parts, and tires. The sale of a computer and printer creates a demand for ink and paper. These products exhibit a degree of mutual dependence. People buy automobiles because they know repair services are available, and they buy repair services because they purchased an automobile.

A review of the complementary, correlated, and derived characteristics of demand for an industry's products enables strategic managers to assess the organization's dependence on the success or cooperation of companies in other industries. A high degree of dependence is a danger signal. If the firms in the other industry are successful, healthy, dependable, and reliable, then a derived-demand situation can be quite profitable. In this situation, however, the firm's destiny is controlled in part by the actions of the other firms. This is seldom a comfortable circumstance. Firms in the complementary industries must be monitored constantly. One strategy that is often used in these circumstances is to merge with or acquire a firm that produces the needed products. If the other firm's products are complementary, the acquisition or merger is called horizontal integration. If the acquired firm's products create a derived demand, it is called forward vertical integration.

Generally, industries or markets that rely heavily on complementary products are less attractive to enter.

Bargaining Power of Buyers

Candy bars are sold to millions of individual buyers. The purchaser does not negotiate the price or the terms of sale. Commercial aircraft, on the other hand, are sold to just a few large airlines or leasing companies, which have the power to negotiate many aspects of the terms of sale. Defence weapons are often sold to only one purchaser—the USA government. Therefore, the government has a great deal to say about the terms of sale. In industries with many sellers and few buyers, the sellers are at a disadvantage. Price competition tends to ensue. In industries with few buyers and few sellers, the bargaining powers of sellers and buyers are often about equal. In this situation, a seller's ability to negotiate and to "cut good deals" often determines its success.

A review of the relative bargaining power of the buyers of an industry's products enables strategic managers to gauge the firm's market power. In general, the greater the bargaining power of buyers, the less advantage the sellers have. This makes an industry or market less attractive to new entries.

Bargaining Power of Suppliers

The flip side of an assessment of the relative bargaining power of buyers is an assessment of the relative bargaining power of suppliers. The firm's buyers influence prices and marketing costs. Its suppliers influence production costs. Suppliers tend to be powerful if there are just a few of them, there are few alternative sources of supply, their product is important for the firm's business, and they are not dependent on the firm's purchases to have a successful business.

A review of the conditions of supply in the firm's resource markets—the markets in which it purchases labour, raw materials, facilities, and other important factors of production—enables strategic managers to determine how much bargaining power its suppliers possess. In general, the greater the bargaining power of the supplier, the less advantage the firm has and the less attractive the industry is to newcomers. A process called backward vertical integration is often used to acquire suppliers with which the firm has weak bargaining power.

Technological Sophistication of the Industry

Some industries, such as retailing, currently employ a relatively low level of technology. Others, such as oil field information and services, depend heavily on scientific research and high-level technology. A high-tech firm must invest heavily in research and development, must often locate itself near a university or other research organization, and must strive to protect its position through secrecy, patents, and copyrights. The low-tech firm, on the other hand, always faces the possibility of intense competition because of its lower barrier to entry. Therefore, opportunities and threats are present whether technology is high or low.

Strategies for success are quite different depending on whether high or low technology is employed. In general, established firms in high-tech industries must emphasize research and development and offer specialized services to be successful. Established firms in low-tech industries must emphasize product identification, marketing, competitive pricing, value, and quality, as well as providing general services. In analysing the attractiveness of the industry to newcomers it is important to consider how easily the new firm can acquire the required technological sophistication. Generally an industry with a high technological sophistication is less attractive to newcomers' especially small ones that do not have access to capital.

Rate of Innovation

Some industries, such as the table salt industry, are placid, stable, and subject to little change. Others, such as those in the computer field, are characterized by continuous, dramatic innovation. Innovation depends on two things: new ideas and the willingness and ability to carry them out.

Technological change is often the primary stimulus for innovation. The other main stimulus for innovation is new ways of thinking about service. Fifty years ago, Ray Kroc's new idea about fast food service created McDonald's; Walt Disney's vision of a family-oriented park created Disneyland; and Colonel Sanders' idea that homemade southern-fried chicken should be available nationwide created Kentucky Fried Chicken. None of these three innovators relied heavily on technological development. Rather, they depended on new ideas about products, services, and markets. These ideas revolutionized the industries involved.

A technological assessment and an environmental scan for new ideas about products, services, and markets, together with an estimate of the willingness and capability of the industry to adopt innovations, enables strategic managers to determine the rate of innovation in the industry.

In general, if the rate of innovations in an industry is high, the firm must have a flexible organization and be heavily committed to R&D and strategic planning to succeed. If, on the other hand, the rate of innovation is low, the firm must focus on marketing, sales, and cost reduction. Determining how attractive the industry is to newcomers is not easy. Managers must first consider the types of innovation happening in the industry and then determine if newcomers can easily adapt. In the case of industries with a low level of innovation the main consideration must focus on how easily newcomers can gain market share and achieve cost competitiveness.

Management Capability

All of the preceding factors are tempered by one final consideration: What is the quality of management in the industry? Are there many competent and capable managers, or are there just a few? How many top managers does the industry have, and how highly qualified is each one? The long-term resiliency of an industry depends on the number of outstanding managers and on the chain of succession. During the 70's and 80's the overall quality of management slipped in the American automobile industry, allowing the Japanese to gain an important advantage. Ultimately, quality management depends on entrepreneurship, sound decision-making, and the "fit" of the manager's style with the demands of the situation.

A review of the breadth and depth of good management enables strategic managers to determine the general level of management capability in the industry. In general, when there are many capable managers in an industry, it is difficult for one firm to gain an advantage over another. If there are very few capable managers, a firm with a few exceptional managers can often gain an advantage. Strategic managers must also look out for firms that, out of ignorance or incompetent management, make stupid moves that can affect the viability of the industry. An industry that is especially vulnerable on this dimension may not be a good choice to enter.

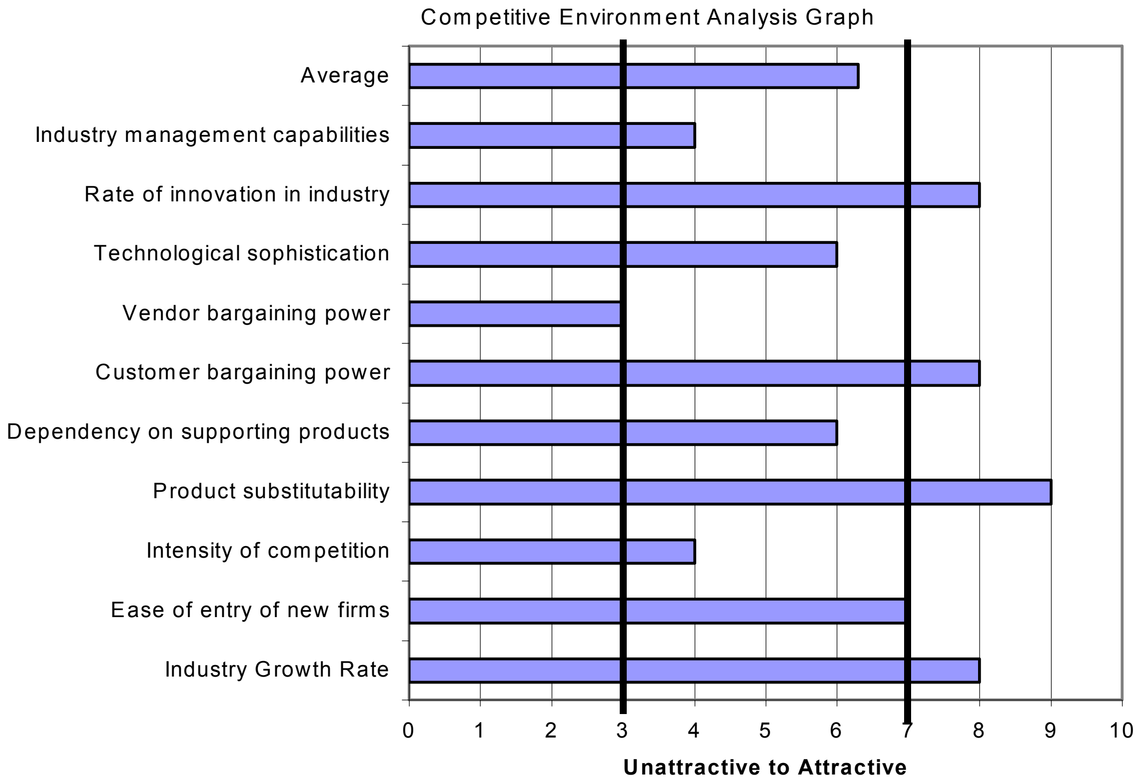
In applying these key factors in a Competitive Environment Analysis it is useful to use a standardized model. To use the model, managers take the position of an organization looking at entering the industry. They rate each factor on a scale of one to ten based on how attractive the factor is for newcomers into the industry. A factor score of ten indicates a very attractive and compelling reason for newcomers to enter the industry, whereas a score of 1 would indicate a serious barrier to new firms. An average score above 6 indicates that firms in the industry need to pay attention to possible new entries. The higher the averages score the higher the probability that newcomers will enter and succeed. A low score reflects an unattractive industry to new entries. In this situation firms need to monitor the environment for changes in the key assumptions.

Competitive Environment Analysis

A convenient way to formalize the CEA is to create a scoring grid and table that contains Porter's 10 factors. Each factor can be scored on a scale of 0 to 10 with 0 being very unattractive to newcomers and 10 being extremely attractive to newcomers. All assumptions that have been used for the scoring of the factor should be documented. An example follows.

Factor	Score	Assumptions
Industry Growth Rate	8	Although potential decline still well above average.
Ease of entry of new firms	7	Fragmented industry, niche markets are key.
Intensity of competition	4	Niche requirement, strong and varied competition.
Product substitutability	9	Many product subs, no real industry substitutes.
Dependency on supporting products	6	Economic cycles determines elasticity, not products.
Customer bargaining power	8	Seller dictates terms and price.
Vendor bargaining power	3	Supplier dictates price, small competitors.
Technological sophistication	6	High degree of sophistication but it can be bought.
Rate of innovation in industry	8	High rate of innovation but easy to obtain same level.
Industry management capabilities	4	Very capable managers, hard to compete.
Average	**6.3**	

Once the scoring grid has been completed, a chart showing the outcome should be generated. This graphical depiction can be used to set upper and lower limits for the purpose of isolating dominate positive and negative factors. Normally these boundaries are set at 7 and 3. Any factors that score greater than 7 can be considered highly positive for newcomers and any factors that score 3 or less can be considered as negative to new entries.



From the table and the graph, managers can draw general findings regarding the competitive environment. These findings are used later in the external analysis process and again in the strategy formulation phase. From the graph above we can say that this industry is attractive to new entries based on the industry growth rate, ease of entry, lack of product substitutability, lack of customer bargaining power, and the rate of innovation in the industry. The only real issue faced by a healthy company entering this industry is the supply chain.

Industry Attractiveness Analysis

Using the information obtained by applying Porter's competitive environment analysis, one can now utilize the Industry Attractiveness Analysis (IAA) to determine how attractive an industry might be for a company wishing to enter or remain in an industry based on its current situation. For example, is there potential growth, or is it limited? How easy is it to switch brands? What is the profitability? And so on. In using the IAA, one analyses the forces impacting 16 factors and assigns a score from 0 to 10 to reflect the degree of attractiveness that industry has for the company. Where the industry requirements fit the core capabilities and competencies of an organization, the attractiveness score is highest. On the other hand, if the company is unable to meet the industry requirements, the attractiveness score is low. Thus, for example, a company that is able to cope with all 16 of the factors shown might "ideally" have a score of 160. There are very few such companies. The majority of companies are likely to fall in the range of 80 through 128. (If each of the scores were 5, then the total would be 80, whereas if each of the scores were 8, the total would be 128.) Where a score is lower than 80, the strategic manager whose firm was already in that industry would have to consider significant repositioning in the industry in order to continue to operate on a profitable basis. One such approach, segmentation, was described earlier.

Other factors that need to be considered in analysing an industry include resource requirements, government intervention, and industry structure. The availability of resources often becomes a critical aspect of carrying out strategy. For example, if funds are not available, a company could be headed for bankruptcy. Thus one must determine capital-investment requirements along with how much working capital is needed to sustain the company. This may depend on the capital-intensity in a given industry. For example, many companies "outsource" their computer operations to reduce the investment required in equipment, facilities, and personnel. If key personnel are lacking, the company may be unable to function effectively. If critical materials cannot be had at a competitive price, or if physical facilities and equipment are not available, the company may be unable to maintain a competitive position.

Government intervention may significantly affect the ability of a company to compete within an industry. Often local governments (such as the state of California) impose stringent ecological requirements that force companies to either spend huge sums of money to correct the situation or move out of the state. For example, Kaiser Steel in Fontana, California, had to shut down its steel mill there because it was deemed uneconomical to implement the pollution-control equipment needed to reduce the emission of smoke and harmful particles as much as the law required. Increasingly, requirements for health and pension benefits are imposing costs that can make an industry non-competitive. In many cases companies will outsource to suppliers in emerging markets where controls are less stringent. A critical function of an organization is to assess changes in government requirements, social legislation, bankruptcy laws, and the like in order to ensure that it is in compliance and is able to compete effectively given the industry demands.

In addition to considering the foregoing factors, one must ascertain how the industry deals with the "four P's" that are related to marketing practices.

Product

What is the given product in the industry? Sometimes this is difficult to determine, especially in the field of electronics and high technology.

Prices

How are prices established in the industry? Are they related to cost or the learning curve? Are products in the industry price-elastic or price-inelastic?

Promotion

An important consideration in gaining acceptance of products is the amount of funds spent on advertising and other promotional activities.

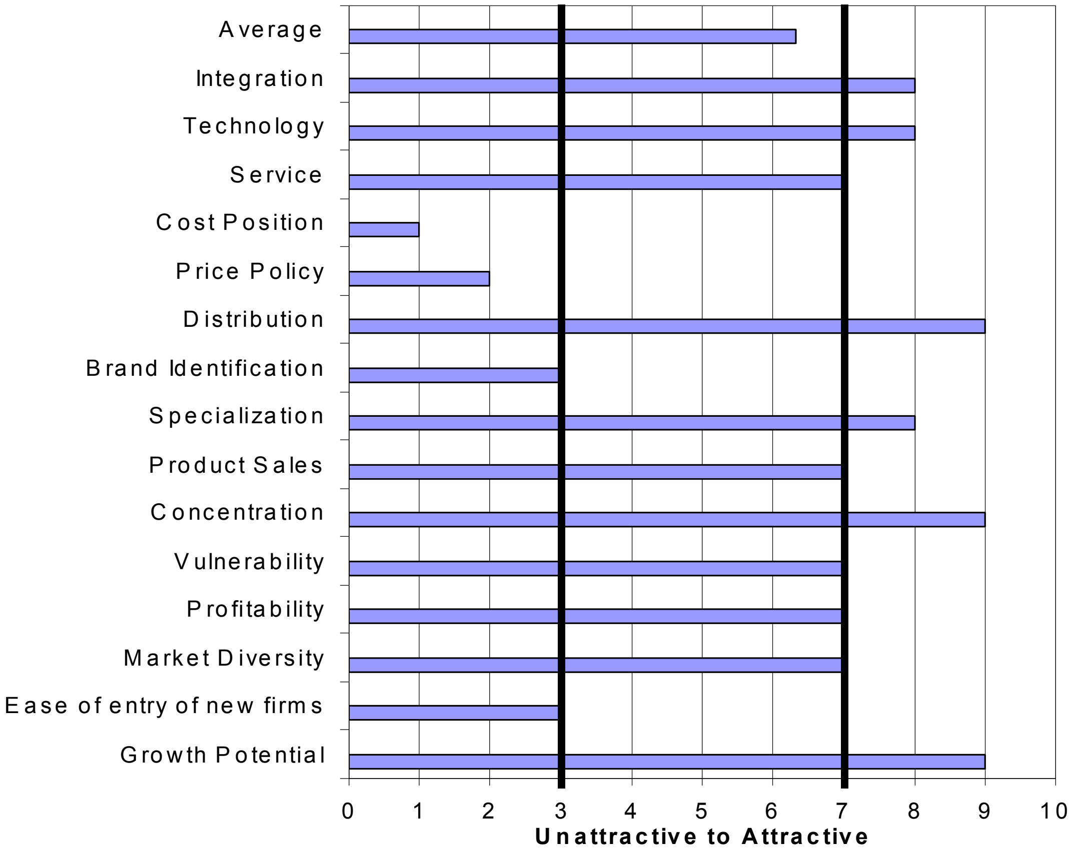
Place

Geography, distribution channels, infrastructure, and location all influence performance in an industry. Whether the firm uses direct sales, telemarketing, representatives, or other channels of distribution often determines where a company is located. The following is a sample IAA. All factors have been scored on the 1 to 10 scale and the basic assumptions listed.

Industry Attractiveness Analysis

Factor	**Score**	**Assumptions**
Growth Potential	9	Can capitalize on growth rate, good marketing team.
Ease of entry of new firms	3	Entries are possible; Company is not prepared to defend.
Market Diversity	7	Very diverse market, room to grow and expand.
Profitability	7	Very profitable niche areas, can capitalize with differentiation.
Vulnerability	7	Moderate vulnerability, economic cycles.
Concentration	9	Fragmented market, Senators compete in local region.
Product Sales	7	Affected by cyclical economy, seasons are an advantage.
Specialization	8	Senators offer unique focused product.
Brand Identification	3	Industry does not support brand loyalty.
Distribution	9	Industry has good distribution network, Senators use it well.
Price Policy	2	High elasticity, industry pricing norms hurt the Senators.
Cost Position	1	Poor cost position, higher than the norm.
Service	7	Senators meet all industry requirements, service, quality…
Technology	8	Able to meet industry technology, uniqueness.
Integration	8	Meet or exceed industry norms, well integrated vertically.
Average	6.3	

Industry Attractiveness Graph

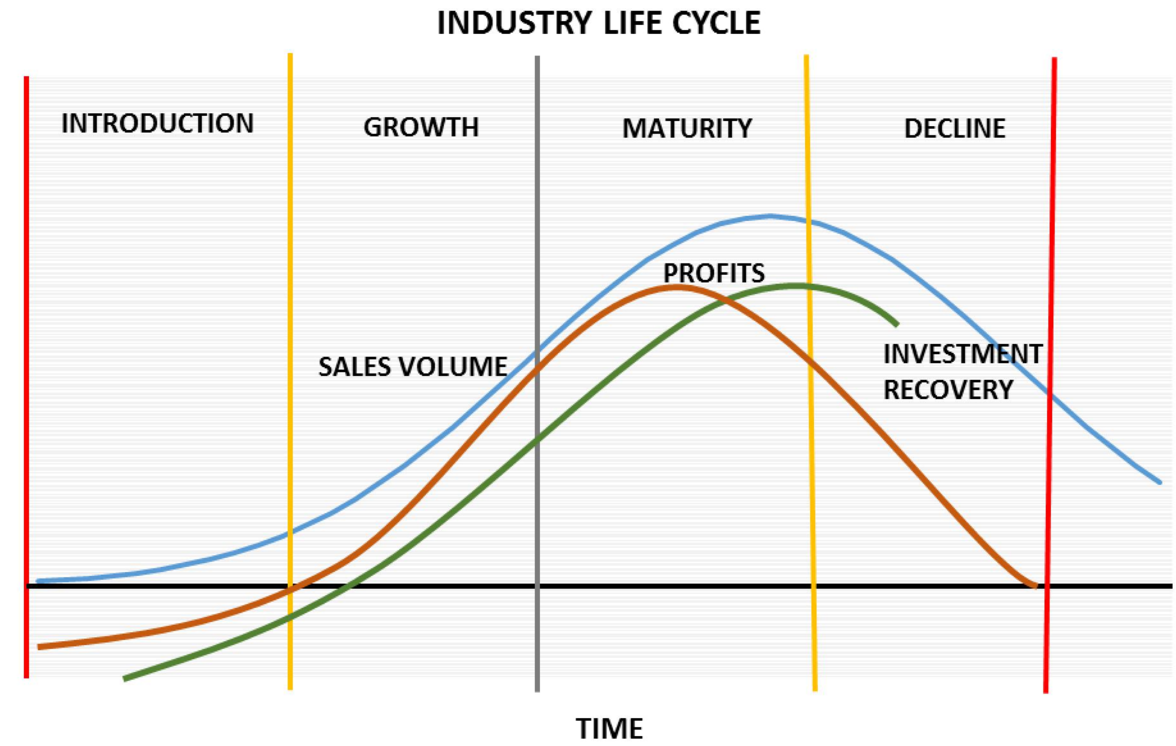


Like the CEA, once the table has been generated, it is useful to construct a bar graph showing upper and lower limits. Any factor that meets or exceeds the upper limit of 7 is considered key to the firm's success in the industry and should be capitalized on. Any factor falling on or below the lower limit of three must be considered a serious threat to the company's ongoing ability to compete in the industry. If an organization has an average score of five or less then it is in serious jeopardy. Once managers have completely reviewed both the graph and the table, they should summarize their general findings for use in later models.

Industry Lifecycle Analysis

Another consideration in the analysis of an industry is examination of the industry life cycle. The majority of companies in an industry go through life cycles, and the cumulative effect leads to changes in industry size, profitability, and performance. As companies accumulate knowledge and their products and processes undergo innovation, industries tend to reach a saturation point. Thus, for example, the aircraft industry has reached the point in its life cycle where the technology is fairly well known, physical facilities are in place, and capital is also made available to sustain the companies within the industry. As a consequence, the rate of growth in that industry is limited by variables such as alternative modes of transportation, access to airport, and cost of gasoline. Sustaining oneself in the aircraft industry is becoming increasingly difficult. At the present time, there are two dominant players; Boeing and the European Airbus.

While some industries merely reach a point of saturation or low growth potential, others enter a declining stage. Decline is often due to technological obsolescence, but it can also be caused by government regulation or consumer needs. As industry demand declines competitors are faced with excess capacity. In many cases this can lead to an environment of failing price structures where only those companies that compete based on low cost structures can continue to operate. When confronted with the problems of a declining industry, many companies may choose to exit. An interesting case in point occurred in the early 90’s when Avery International actually paid an Italian company two million dollars to take over its business. This was because the financial impact of exiting was too high due to the cost of laying off workers. It was cheaper to pay someone to take the business than to shut it down.



Once the industry has been plotted on the life cycle graph, managers should select the key characteristics and compare them against their view of the industry. By doing so additional assumptions concerning the future and the company’s ability to deal with these possible situations can be determined. These assumptions should then be stated as opportunities or threats and used in future models.

Characteristic	*Introduction*	*Growth*	*Maturity*	Decline
Concentration of competitors	High; few pioneers	Declining as more competition enters	Increasing after shakeout	High; few remaining harvesters
Product differentiation	Low, if any	Increasing; imitations and variations	High; increasing market segmentation	Decreasing as competitors leave market
Barriers to entry	High, if product can be protected	Decreasing; growing technology transfer	Increasing as capital intensity increases	High capital intensity, low returns
Barriers to exit	Low; little investment	Low, but increasing	High for large company	Decreasing; endgame
Price elasticity of demand	Inelastic, few customers	Increasingly elastic	Inelastic only in segments	Very elastic; Bargaining power of buyers high
Ratio of fixed to variable cost	Generally low	Increasing	High	Decreasing
Economies of scale	Few, generally unimportant	Increasing capital intensity	High	High
Experience-curve effects	Large early gains	Very high; large production volume	Decreasing magnitude	Few
Vertical integration of competitors	Low	Increasing	High	High
Risk involved in business	Low	Increasing	High	Declining exit barriers

External SWOT Analysis

When all the relevant factors have been identified from the environmental scan, managers can develop an environmental threat and opportunity profile. This adapted SWOT[2] analysis gives the first indication of potential external opportunities and threats. Depending on the impact and consequence of each factor, managers can determine whether that factor may pose a threat to the firm, is neutral, or represents an opportunity.

Environmental threats do not have to be accepted as givens. It is often possible to develop a strategy that will change them in a favourable way. In other words, the organization can choose to be proactive rather than reactive. If the threat is restrictive legislation, for example, the organization can either accept the restriction as inevitable or lobby the legislature in an effort to prevent its being enacted. This ability to anticipate and minimize the effect of threats explains why environmental scanning is an important early step for managers who are developing new strategies.

Sample External SWOT (OT)

Opportunities	Threats
High growth rate, increased consumer spending.	Increased concentration.
Synergies with media companies & others.	Higher labour /player costs.
Increased product differentiation is possible in industry.	WWW popularity will grow quickly.
Excellent brand recognition.	Potential downturn in economy.
Alternative distribution channels are being opened.	Low barriers to entry.
Economic consolidation within industry.	Low cost alternatives.
Increased requirements for value added and customer service.	Price elasticity.
Strategic market segmentation opportunities.	Fickle marketplace, lack of loyalty.
New NHL boundaries.	Erosion of profit sanctuaries through consolidation and EOS pressure.
Broadcasters still looking for sports programming.	Multiple markets need to be served to compete on cost.
Regional cable rights in Canada and new Sports TV network.	

[2] SWOT – Strengths, Weaknesses, Opportunities, & Threats

External Factor Evaluation Matrix

The External Factor Evaluation (EFE) Matrix allows strategists to summarize and evaluate economic, social, cultural, demographic, environmental, political, governmental, legal, technological, and competitive information. There are five steps in developing an EFE Matrix:

1. List key external factors as identified in the general findings from each of the previous models (CAM, CEA, IAA, Life Cycle Analysis, and SWOT). Include a total of from 10 to 20 factors, including both opportunities and threats affecting the firm and its industry. List the opportunities first and then the threats. Be as specific as possible, using percentages, ratios, and comparative numbers whenever possible.

2. Assign to each factor a weight that ranges from 0.0 (not important) to 1.0 (very important). The weight indicates the relative importance of that factor to being successful in the firm's industry. Opportunities often receive higher weights than threats, but threats too can receive high weights if they are especially severe or threatening. Appropriate weights can be determined by comparing successful with unsuccessful competitors or by discussing the factor and reaching a group consensus. The sum of all weights assigned to the factors must equal 1.0.

3. Assign a 1 to 4 rating to each critical success factor to indicate how effectively the firm's current strategies respond to the factor, where 4 = the response is superior, 3 = the response it above average, 2 the response is average, and 1 = the response is poor. Ratings are based on effectiveness of the firm's strategies. Ratings are thus company-based, whereas the weights in Step 2 are industry-based.

4. Multiply each factor's weight by its rating to determine a weighted score.

5. Sum the weighted scores for each variable to determine the total weighted score for the organization.

Regardless of the number of key opportunities and threats included in an EFE Matrix, the highest possible total weighted score for an organization is 4.0 and the lowest possible total weighted score is 1.0. The average total weighted score is 2.5. A total weighted score of 4.0 indicates that an organization is responding in an outstanding way to existing opportunities and threats in its industry. In other words, the firm's strategies effectively take advantage of existing opportunities and minimize the potential adverse effect of external threats. A total score of 1.0 indicates that the firm's strategies are not capitalizing on opportunities or avoiding external threats.

Sample EFE

Current Key External Factors				
Current Opportunities		Weight	Rating	Score
1	Growth rate, increased consumer spending.	0.08	3	0.24
2	Synergies between media and other industry competitors.	0.06	1	0.06
3	Increased product differentiation.	0.04	3	0.12
4	Branding.	0.03	3	0.09
5	Access to alternative distribution channels.	0.02	2	0.04
6	Economic consolidation within industry.	0.04	2	0.08
7	Increased requirements for value added and customer service.	0.06	3	0.18
8	Product differentiation and strategic market segmentation.	0.05	2	0.1
9	Broadcasters need winning programs.	0.1	3	0.3
10	Regional broadcast rights in Canada.	0.16	3	0.48
Total Current Opportunities		0.64		1.69
Current Threats				
1	Low cost alternatives.	0.07	1	0.07
2	Increased concentration.	0.02	1	0.02
3	Low barriers to entry	0.03	1	0.03
4	Price elasticity of the demand.	0.07	1	0.07
5	Fickle marketplace, lack of customer loyalty.	0.02	2	0.04
6	Erosion of profit sanctuaries through consolidation and EOS pressure.	0.02	1	0.02
7	Multiple markets need to be served to compete on cost.	0.02	2	0.04
8	Potential downturn in the economy.	0.03	1	0.03
9	WWW continues to grow quickly.	0.02	2	0.04
10	Higher labour/player costs.	0.06	1	0.06
Total Current Threats		0.36		0.42
Total for Current Key External Factors		1		2.11

Bringing It Together

The final stage in the External Assessment is to summarize the findings of the models. It is useful to make a consolidated list of all the findings and check them for consistency. Any conflicts need to be justified or resolved through re-analysis.

The Internal Assessment

Successful strategies rely on capabilities, which are often difficult for competitors to detect and imitate.

Strategies are becoming more "intelligent." Advantage dwells within the processes and behaviours of the organization: in the responsiveness of its operations, in its management of new customer needs, in its organizational simplicity and flexibility, in the innovativeness of its people, and in its use and management of information technology. In short, responsiveness is becoming a key success factor.

Capability-based strategies are founded on the notion that internal resources and core competencies derived from distinctive capabilities provide the "strategy platform" that underlies a firm's long-term profitability.

A true threat to traditional organizations is the increasing number of organic and flexible capability-based competitors relying on quality/value matching and time-based responsiveness. These competitors often develop completely new and different delivery mechanisms and organizations. In order to ensure that the core competencies reach the customer with maximum impact, they institutionalize time, quality, and value as critical variables in their operations. They achieve a faster and better operation by examining the whole end to end process rather than improving many individual phases. As a consequence, they gain substantial and lasting benefits.

Formulating Capability Based Strategies

Traditionally, strategy has been defined as the process of aligning the internal capability of an organization with the external demands of its environment. The process has focused on the changes in the environment that led to opportunities and threats to which the firm had to adjust. The internal process of alignment to these changes was often taken for granted. Yet a number of studies have shown that differences in profitability within industries are more important than such differences between industries; that is, some companies consistently thrive in difficult environments while others do not succeed even though their industry is very healthy.

The capability-based strategy has become prominent as a means of developing new sources of competitive advantage. Capability-based strategies, sometimes referred to as the resource-based view of the firm, are determined by (a) those internal resources and capabilities that provide the platform for a firm's strategy and (b) those resources and capabilities that are the primary source of profit for the firm. A key management function is to identify what resource gaps need to be filled in order to maintain a competitive edge where these capabilities are required.

Several levels can be established in defining the firm's overall strategy platform. At the bottom are the basic resources a firm has compiled over time. They can be categorized as technical factors (patents, brand identity, manufacturing skills), competitive factors (economies of scale, market share), managerial factors (organizational culture, speed of response to changing conditions), and financial factors (access to capital, cost-competitiveness). Taken together, these four factors establish the advantage base of the firm.

Core competencies, the second layer of the strategy platform, can be defined as the unique combination of the resources and experience of a particular firm. It takes time to build these core competencies, and they are difficult to imitate. Some examples of firms that have succeeded in developing strong core competencies include Wal-Mart (fast-response distribution chain, combined with decentralized information flows), 3M (superior technology in adhesive and coating technologies, combined with creative new-product development), Honda (technical excellence in four-stroke engines, combined with flexible production), and Procter & Gamble (highly developed ability to understand market and customer trends, combined with strong management of international brands).

What seems to distinguish many of these successful firms is that they were able to combine strong technological skills or other know-how with unique and fast ways of (re)generating these skills and delivering them to the customer. Critical to sustaining these core competencies are:

1. **Durability**. Their lifespan is longer than individual product or technology life cycles, as are the life spans of the resources used to generate them, including people.

2. **Transparency**. It is difficult for competitors to imitate these competencies quickly.

3. **Immobility**. These capabilities and resources are difficult to transfer.

Successful firms have established effective mechanisms to safeguard and replenish these core competencies. At the same time, however, they are keenly aware that these core competencies will lose their strength if they are not constantly maintained and upgraded. Therefore, capability-based competitors realize that how they manage their processes and assets is a critical component of their competitive edge. Excellence in delivering core competencies to the customer often requires organizational delivery mechanisms that are based on:

- **Speed of response**—the ability to pre-empt the competition with faster new-product introduction or a faster, more responsive service.
- **Quality**—this increases customer satisfaction and allows the firm to win market share.
- **Responsiveness to the customer**—the ability to better understand customer and competitive developments.
- **Team organization**—the ability to be faster and more effective by breaking traditional functional departmentalization.
- **Organizational learning**—the ability to learn through shared insights, models, knowledge, and experience and the ability to increase know-how and competencies within the firm.

The implications of a capability-based approach to strategy formulation are obvious. An analysis of the profit-generating potential of resources and capabilities shows that preservation and regeneration of these capabilities play a vital role in strategy development. The essence of strategy formulation, from this perspective, is to design a strategy that makes the most effective use of the firm's resources and core competencies and then to concentrate on developing the firm's mechanisms for effectively delivering these capabilities to its customers.

Sustainable Competitive Advantage

It is not necessarily difficult to achieve a competitive advantage by taking extraordinary steps. Sustaining it, however, is difficult. A sustainable competitive advantage has a reasonable lasting effect and helps the company to achieve its strategic goals. Three conditions of sustainable competitive advantage are:

1. The customer consistently perceives a positive difference between the products or services offered by the company and those offered by its competitors. These differences include quality, uniqueness, value, or cost competitiveness.

2. The perceived difference results from the company's relatively greater capability.

3. The perceived difference persists for a reasonable period of time.

The positive difference is based on additional attributes, such as price, aesthetics, functionality, availability, visibility, and after-sales service. Positive differences in these areas help the company to establish a niche in the market.

Competitive advantage is durable only to the extent that it cannot be readily imitated. Four capability gaps have been identified that help to prevent imitation by competitors:

1. Business-system gaps such as good working conditions.

2. Image gaps resulting from reputation, consumer awareness, and trust.

3. Uniqueness gaps that limit competitors' actions, including patents, licenses, and regulations regarding consumer safety.

4. Strategy gaps that reflect the organization's capacity for innovation, flexibility, and ability to adapt.

To sustain its competitive advantage, the company must continue its expenditures for research and development, product improvement, performance enhancement, advertising, responsiveness to customer needs, delivery, and service. If a competitor can match these capabilities, the company may lose market share. Apple Corporation is a prime example of a company that does this well. However, with Steve Jobs gone, it will be interesting to see where Apple goes after one or two development cycles.

A company that recognizes the need to sustain its competitive advantage will choose ongoing strategies aimed at maintaining its market share and profitability. This requirement is not satisfied by preparation of a single strategic plan for the company as a whole or its SBUs but requires constant monitoring, updating, and focusing on actions that will sustain a competitive edge. Many companies that are now defunct did not recognize that the overriding "strategy" must be to stay ahead of the competition and in tune with changes in the external environment.

Financial Ratio Analysis

The financial viability of a firm determines its capacity to survive. Without a source of funds, internal or external, an organization cannot continue to exist. It is estimated that 90% of new ventures that file for bankruptcy do so because they lack working capital. Assessing the desirability of entering an industry, determining product value, and ascertaining whether the firm can meet competition requires appropriate financial analysis.

To compete effectively in today's global markets, companies must focus their efforts where they can achieve the best possible cost advantages relative to their rivals. To determine where the best cost advantages lie, strategic managers need to analyse the cost structure of their own company and the cost structures of their main competitors. The strategic manager can then develop strategies that reduce costs where possible.

One widely used technique for evaluating performance and for comparing a business with others in an industry is financial ratio analysis. Financial ratios can provide a quick overview of a company's recent or past profitability, liquidity, leverage, and activity. Financial ratios, which often are employed for merger or acquisition decisions, can be used to show:

1. The firm's position in its industry.

2. The degree to which strategic objectives are being accomplished.

3. The firm's vulnerability to decreases in revenue.

4. The future borrowing power and growth potential of the firm.

5. The firm's ability to react to unforeseen changes in the environment.

6. The risk of corporate failure.

Financial ratios have been used for years as indicators of the wellbeing of a company. Financial ratio analysis is used to assess a company's internal strengths and weaknesses from an operational and financial perspective. Given the considerable amount of financial data available about competitors, financial analysis is also a viable way of making comparisons within an industry. It is important to recognize, however, that these ratios reflect the past; therefore, they are often more useful for evaluating past performance than for planning future strategies.

Each of the four key areas chosen for analysis comprises a number of ratios. The four areas are: profitability, liquidity, leverage, and activity of the firm. To evaluate the performance of a company with respect to these ratios, the following three methods are used:

1. **Industry comparisons**. To perform this analysis, managers compare the company's financial ratios to those of similar firms in the same industry. The other firms must be comparable; that is, they should be of about the same size, sell similar products, and serve the same markets. If this is not the case, results of the comparison can be misleading.

2. **Time-series analysis**. This method involves computing the company's financial ratios for several past years and plotting them on a graph to detect changes and trends over time and project future performance.

3. **Comparison to absolute standards**. In many organizations, minimum financial ratios serve as absolute standards for performance. Such absolute standards include:

    - Profitability: net profit, the ratio of profits after taxes to sales: no less than 3%
    - Liquidity: ratio of current assets to current liabilities: greater than 1
    - Leverage: ratio of long-term debt to total equity: less than 1
    - Activity: average collection period: less than 60 days

A complete financial analysis generally includes all three of these methods. These methods are often supplemented by doing an industry comparison. Managers also rely on comparative data from companies such as Dun & Bradstreet to assess their relative profitability, liquidity, leverage, and activity ratios.

Profitability Ratios

Return on Equity (ROE)

Calculated as **Net income / Owners' equity**. ROE indicates how much return the company is generating on the historically accumulated owners' investment (contributed share capital and other capital items plus retained earnings). Owners' equity can be taken straight from the balance sheet or can be computed from the balance sheet equation as Total assets - Total liabilities. The denominator can be year-end equity or average equity over the year; for a growing company, you'd expect a slightly larger ROE figure for the latter. This ratio is also known as return on shareholders' investment or return on net worth.

Return on Assets (ROA)

Usually calculated as **(Net income + Interest expense) / Total assets**. As with equity in ROE, the total assets figure can be the year-end figure or the average over the year. ROA indicates the company's ability to generate a return on its assets before considering the cost of financing those assets (interest). It helps in judging whether borrowing is worthwhile: presumably if it costs x% to borrow money, the company should expect to earn at least x% on the assets acquired with the money. This relationship between ROA and borrowing cost is explored later in this guide. This ratio is also known as Return on Investment or ROI.

Managers should use a slightly refined version of ROA by calculating the interest expense after income tax, because if interest is just added back to income, the impact of the tax saving it brings is lost. However they must also calculate the ROA without the tax adjustment when comparing to other companies.

For the refined ROA, first calculate the after-tax interest cost. **After-tax interest cost = Interest expense x (1 -Tax rate)**. Next add the adjusted interest cost to the net income then divide by total assets.

Sales Return

Also known as profit margin, it usually calculated as **Net income/Revenue**. Sales return indicates the percentage of sales revenue that ends up as income, so it is the average "bottom line" profit on each dollar of sales. For example, a .10 sales return would mean that 10 cents in net income, after income tax and all other expenses, are generated from each Euro of sales, on average. It is a useful measure of performance and gives some indication of pricing strategy or competition intensity. For example, you might expect a discount retailer in a competitive market to have a low sales return, and an upscale jeweller to have a high return.

Common Size Financial Statements

By calculating all balance sheet figures as percentages of total assets and all income statement figures as percentages of total revenue, the size of the company can be approximately factored out. This procedure assists in comparing companies of different sizes and in spotting trends over time for a single company.

Gross Margin

Also known as gross profit ratio, calculated as **(Revenue - Cost of goods sold) / Revenue**. This provides a further indication of the company's product pricing and product mix. For example, a gross margin of 33% indicates that the company's average mark-up on cost is 50% (revenue equals 150% of cost, so cost is 67% of revenue and gross margin is 33%). This is a rough indicator only, especially for companies with a variety of products or unstable markets.

Average Interest Rate

Calculated as **Interest Expense / Liabilities**. There are various versions of this ratio, depending on whether interest expense is calculated before or after income tax and on whether all liabilities are included or just the interest-bearing ones, such as bonds and mortgages. If it is calculated on an after-tax basis and applied to all liabilities, it is likely to be quite low: interest is tax-deductible, so income tax savings amount to a third to a half of it and many liabilities, such as deferred income tax, minority interest liability, dividends payable, and most accounts payable, carry no interest.

Cash Flow to Total Assets

Calculated as **Cash generated by operations / Total assets**. Cash generated by operations is found in the Statement of Changes in Financial Position and total assets may be the year-end balance sheet figure or an average of the beginning and ending figures. This ratio relates the company's ability to generate cash resources to its size. This ratio approximately factors out scale effects. It provides an alternative return measure to ROA, focusing on cash return rather than on accrual income return as used in ROA.

Earnings per Share (EPS)

Conceptually, this ratio is calculated as **(Net income - Dividends on preferred shares) / Average number of common shares outstanding**. EPS relates earnings attributable to common shares to the number of common shares issued, thereby providing a sort of down-to-earth performance measure. It is also another way of factoring out the company's size. If you have only a 100 shares of a large company, it is not easy to understand what the company's multi-million-dollar income means to you. But if you are told that the EPS are $2.10, you know that your 100 shares earned $210 for the year and can then relate the company's returns to your own circumstances.

Calculating EPS is a little complicated, so Generally Accepted Accounting Principles (GAAP) require that publicly traded companies in North America provide it in their financial statements. That way shareholders may compare the company's return to their circumstances, helping them to evaluate the worth of the shares and to compare various companies' returns to the prices of their shares on the stock market. Because it is part of the financial statements, it is for most companies the only audited ratio.

For small, closely held companies, however, it is not as meaningful because the owners usually cannot trade their shares readily and are likely to be interested in the value of the overall company more than in that of individual shares. GAAP, consequently, do not require EPS for smaller companies.

More than one version of EPS can appear in the same set of statements. If a company has extraordinary items, discontinued operations, or other anomalies, EPS is calculated both before and after such items, so that the effect of such items may readily be seen. Also, if the company has potential commitments to issue further shares, such as in stock-option plans to motivate senior management or preferred shares convertible to common shares at the option of the holder of the preferred shares, the potential effect of the exercise of such commitments is calculated by showing both ordinary EPS and "fully diluted" EPS. ("Dilution" refers to the potential lowering of return to present shareholders resulting from other people's exercising rights arising from commitments already made by the company.)

Book Value per Share

Calculated as **(Shareholders' equity - Preferred shares) / Number of common shares outstanding**. Similar to EPS, this ratio relates the portion of the shareholders' equity attributable to the residual common shareholders to the number of shares outstanding, and so brings the company balance sheet down to the level of the individual shareholder. It is not really a performance ratio, but shareholders' equity does include retained earnings, so it incorporates accumulated performance. Because the balance sheet's figures do not reflect the current market value of most assets or of the company as a whole, many people feel that book value per share is a largely meaningless ratio, but you will see it mentioned in many financial publications.

The book value per share and market price per share may be compared to indicate how similar the accounting figures are to the market's evaluation of the company. The two are determined by different processes (book value is measured by GAAP based largely on the historical cost basis, while market price is determined by the market's expectations of future performance as well as current value), so they would be the same only by coincidence. However, a comparison of the two for various companies may indicate companies that appear to be overvalued or undervalued by the market, according to accounting's measure of financial position.

Price-Earnings Ratio

Calculated as **Current market price per share / EPS**. The PE ratio relates the accounting earnings and market price of the shares, but, since the relationship between such earnings and changes in stock market prices is not straightforward, the interpretation of PE is controversial. Nevertheless, it is a widely used ratio, appearing in many publications and analysis of companies. Many online stock websites include PE in their daily summaries of each company's stock market trades and prices.

The idea is that, because market price should reflect the market's expectation of future performance, PE compares the present performance with those expectations. A company with a high PE is expected to show greater future performance than its present level, while one with a low PE is not expected to do much better in the future. High-PE companies are those that are popular and have good share prices, while low-PE companies are not so popular, having low share prices relative to their present earnings. PE is highly subject to general increases and decreases in market prices, so it is difficult to interpret over time and is more useful when comparing similar companies listed in the same stock market at the same time.

Dividend Pay-Out Ratio

Calculated as **Annual dividends declared per share / EPS**. This is a measure of the portion of earnings paid to shareholders. For example, if the dividend pay-out ratio is .40, 40% of income was distributed to shareholders and the remaining 60% was kept in the company (retained earnings) to finance assets or reduce debts. A stable ratio would suggest that the company has a policy of paying dividends based on earnings, and a variable ratio would suggest that other factors than earnings are important in the board of directors' decisions to declare dividends.

Activity (Turnover) Ratios

Total Asset Turnover

Calculated as **Revenue / Total assets**. This and similar turnover ratios relate the company's Euro sales volume to its size, thereby answering the question: How much volume is associated with a Euro of assets? Turnover and profit-margin ratios are often useful together because they tend to move in opposite directions. Companies with high turnover tend to have low margins, and those with low turnover tend to have high margins. Those extremes represent contrary marketing strategies or competitive pressures: pricing low and trying for high volume verses pricing high and making more on each unit sold.

Inventory Turnover

Calculated as **Cost of goods sold expense / Average inventory assets**. (If cost of goods sold is not disclosed, it is often replaced by sales revenue in calculating the ratio, which is all right for comparing one year to another for one company, as long as mark-ups and product mixes do not change substantially.) This ratio relates the level of inventories to the volume of activity. A company with low turnover may be risking obsolescence or deterioration in its inventory and/or may be incurring excessive storage and insurance costs. Most companies have attempted to cut inventories to the minimum, keeping just enough on hand to meet customer demand, ordering inventory as it is demanded by customers, or negotiating drop shipment agreements with suppliers.

Collection Ratio

Often called days' sales in receivables or receivables turnover, it is calculated as **Accounts receivable / (Revenue/365)**. This ratio indicates how many days it takes, on average, to collect a day's sales revenue. It becomes large when accounts receivable become larger relative to sales, so its interpretation is the opposite of those of the previous two turnover ratios: a large collection ratio is a negative signal, raising questions about the company's policies of granting credit and the vigour of its collection attempts. The ratio is subject to significant seasonal changes for many companies, usually rising during heavy selling periods, such as just before Christmas for a retailer, and falling during slow times. It would be preferable to use only revenue from credit sales in the denominator, since cash sales are collected immediately, but few companies break their revenue figures down to separate cash revenue.

Financing (Leverage) Ratios

Debt-Equity Ratio

Calculated as **Total liabilities/Total equity**, or sometimes as **Total external debt/Total equity to exclude deferred revenue, deferred income tax, and other liabilities that are consequences of accrual accounting's revenue and expense matching** more than they are real debt. This ratio measures the proportion of borrowing to owners' investment (including retained earnings) and thus indicates the company's policy of financing its assets. A ratio greater than one indicates the assets are financed mostly with debt, while a ratio less than one indicates the assets are financed mostly with equity. A high ratio, well above one, is a warning about risk: the company is heavily in debt relative to its equity and may be vulnerable to interest rate increases, general tightening of credit, or creditor nervousness. A high ratio also indicates that the company is leveraged, which means it has borrowed to increase its assets over the amount that could be acquired with owners' funds only and hopes thereby to increase returns and benefit the owners.

Long-Term Debt-Equity Ratio

Calculated as **(Long-term loans + Mortgages + Bonds + Similar debts) / Total Equity**. This ratio, which has many versions, depending on which specific items the analyst decides to include as debt, is frequently referred to as the debt/equity ratio, under the apparent assumption that longer-term debt is more relevant to evaluating risk and financing strategy than are either the shorter-term debts, such as accounts payable, or the accrual accounting residuals, such as deferred income taxes and minority interest liability included in total liabilities.

Debt to Assets Ratio

If calculated as **Total liabilities / Total assets**, this ratio is the complement of the debt-equity ratio discussed above and indicates the proportion of assets financed by borrowing. It may also be calculated by just comparing long-term debt or external debt to assets.

Liquidity and Solvency Warning Ratios

Working Capital (Current) Ratio

Calculated as **Current assets / Current liabilities**. It indicates whether the company has enough short-term assets to cover its short-term debts. A ratio above 1 indicates that working capital is positive (current assets exceed current liabilities), and a ratio below 1 indicates that working capital is negative. Generally, the higher the ratio, the greater the financial stability and the lower the risk for both creditors and owners. However, the ratio should not be too high because that may indicate the company is not reinvesting in long-term assets to maintain future productivity. Also, a high working capital ratio can actually indicate problems if inventories are getting larger than they should or collections of receivables are slowing down.

The working capital ratio is a commonly used indicator. Many analysts use a rough rule that says the working capital ratio should be around 2 (twice as much in current assets as current liabilities), but this is simplistic. Many large companies regularly operate with a working capital ratio closer to 1 than 2. The ratio's interpretation depends on the specific circumstances of each company. Interpretation of it is also complex because it is a static ratio, measuring financial position at a point in time and not considering any future cash flows the company may be able to generate to pay its debts. This ratio is most useful for companies having cash flows that are relatively smooth during the year and hardest to interpret for those that have unusual assets or liabilities or that depend on future cash flows to pay current debts. An example of the latter would be a company that owns a rented building: there may be few current assets and large current liabilities for mortgage payments, but, as long as the building is mostly rented and rental income is steady, the company is not in difficulty even though its working capital ratio is low. However, it is more at risk than a similar company with a higher working capital ratio, because that company could more easily weather a loss of tenants due to recession or the opening of a competing building.

Acid Test (Quick) Ratio

Calculated as **(Cash + Temporary investments + Accounts receivable) / Current liabilities**. This is a more demanding version of the working capital ratio and indicates whether current liabilities could be paid without having to sell the inventory, in other words, without having to convince more customers to agree to buy what the company has for sale. There is an even harsher version of this ratio, called the "extreme acid test" that uses only cash and cash equivalents in the numerator. A complementary ratio, Inventory / Working capital, is often used to indicate what percentage of working capital is tied up in inventory. These ratios are all used to signal greater degrees of risk than may be revealed by the working capital ratio alone, and so tend to be used when that ratio is deteriorating or is worrisome for some other reason.

Interest Coverage Ratio

Usually calculated as **(Income before interest expense + Income tax) / Interest expense**. This and similar coverage ratios based on cash flow figures from the Statement of Changes in Financial Position indicate the degree to which financial commitments (in this case those to pay interest on debts) are covered by the company's ability to generate income or cash flow. A low coverage ratio (especially below 1) indicates that the company is not operating at a sufficiently profitable level to cover the interest obligation comfortably and may also be a warning of solvency problems (difficulty in meeting obligations over the long haul).

Ratios are a quick method of breaking the information in the financial statements down into a form that allows for comparability with similar companies and with the financial performance of the company over a number of years. Ratios offer another advantage in that different ratios consider different parts of a company's performance. Thus, if managers do not want to investigate anything more about a company than its liquidity, they might only calculate liquidity ratios, such as the quick and current ratios.

The Scott Formula

Developed by Professor William R. Scott, the Scott formula separates ROE into *operating* and *leverage* components, and then explains the operating component using turnover and profit margin. This means that ROE is broken into efficiency of operations (turnover), profit margins, and leverage.

By using the Scott formula, each ratio’s importance can be assessed by its ultimate impact on the firm’s ROE, so that the metric of shareholder wealth determines the importance of a ratio. If the formula is combined with current sales growth information then a clear picture emerges regarding the most critical elements of an earnings forecast. Together with sales growth, the Scott formula analysis concisely captures the firms current operating and financial strengths and permits comparisons to peer firms or industry averages.

Return on equity	=	Overall operating return before interest cost + Leverage return
	=	(Sales return before interest) x (Asset turnover) + (Operating return - Interest rate) x (Borrowing proportion)
ROE	=	SR x AT + (ROA - IN) x D/E

Where:

- ROE: Same Return on Equity described earlier
- SR Sales Return calculated by adding interest expense after tax back to net income
- AT Total Asset Turnover ratio
- ROA The return on assets you saw previously, the "refined" version computed by adding interest expense after tax back to net income
- IN The average after-tax Interest Rate, calculated as after-tax interest expense divided by total liabilities
- D/E Debt-Equity Ratio

The following is an application of the Scott formula.

	Figures	Symbols
Total Assets	$100,000	A
Total Liabilities	$70.000	L
Total Equity	$30,000	E
Total Revenue	$150.000	REV
Net Income	$6.000	NI
Interest Expense	$7,000	INT
Income Tax Rate	40%	TR
After-tax Interest Expense (Expense X (1-Tax rate)	$4,200	ATI = INT (I -TR)
ROE (Return on Equity)	$6,000/$30,000 = .20	NI/E
SR (Sales Return before interest)	($6,000 + $4,200) /150.000 = .068	(NI + ATI) /REV
AT (Asset Turnover)	$ 150,000 / $100,000= 1.50	REV/A
ROA (Return on Assets)	($6,000 + $4,200)7 $100.000 = .102	(NI + ATI)/A
IN (average Interest Rate after tax)	$4,200 / $70.000 = .06	ATI/L
D/E (Debt-Equity Ratio)	$70.0007 $30.000 = 2.333	L/E

Result:

ROE	=	SR x AT + (ROA - IN) x D/E
	=	0.20
	=	0.068 x 1.5 + (0.102 - 0.06) x 2.333

The Scott formula result for this example company shows that the company's 20% return on equity is made up of:

1. A 6.8% Return on Sales;
2. An Asset Turnover of 1.5 times;

3. Return on Assets of 10.2%;
4. Average Interest Rate of 6%;
5. A Debt-Equity Ratio of 2.333 times.

This provides several points of comparison with other companies or other years. Those comparisons could have been made using the individual ratios listed earlier, but now the ratios are tied to one another so that you can see how each affects return on equity.

The terms on the right of the equal sign can be collected together to summarize the two basic components of the return on equity:

The first is the **Operating Return**, which indicates the company's ability to make a return on its assets before interest costs 6.8% x 1.5 = 10.2%.

The second is the **Leverage Return** (0.102 – 0.06) x 2.333 = 0.042 x 2.333 = 9.8%.

So, we have:

Return on Equity = Operating Return + Leverage return or ROE = ROA + Leverage

20% = 10.2%+ 9.8%

The example company's return on equity, therefore, is a little more than half from operations and a little less than half from using borrowed funds to increase the return to owners. Note that if the two figures on the right don't add up to the figure on the left, there's been an error (perhaps just a rounding error but maybe something more serious). The Scott formula is based on the double-entry financial statements so if the figures are developed correctly, it must balance.

Interpretation of the Scott Formula

The Scott formula is an excellent quick analysis of a company's return on equity because it highlights the individual components of the return as well as the relationships among the components that make up the final return.

Operating Component of Return on Equity

One can see how profit margin (SR) and turnover (AT) interact to produce the operating return (ROA). In one company, a low margin and a high turnover may generate the return. In another, a high margin and a low turnover may generate the return. Profit margin and turnover are likely to offset each other in generating the return on assets because competitive pressures are likely to force selling prices, and therefore profit margins, down if a high turnover is desired. Conversely, if a company wants to cater to the high-priced end of the market, its sales volume would normally be lower than that of low priced competitors. In monopoly or in some oligopoly situations organizations can get both high margin and high volume, however, governments tend to discourage these market forms except when faced with extraordinary circumstances driven by national interest. On the other side of the situation is the difficult situation faced by firms with low margin and low volume. Rarely is this situation sustainable.

Leverage Component of Return on Equity

The Scott formula shows how or if companies use financial leverage, defined as the difference between the cost of money borrowed to provide resources (assets) and the return on those assets. If there is a significant positive difference between the operating return and the cost of borrowing, a company may take advantage of this difference and use leverage to enhance its return by large borrowing relative to its owners' equity base. Another company may have a significant leverage potential (difference between return on asset and cost of borrowing), but not borrow as much and so not utilize it to the same extent. A prudently managed company does not borrow too much relative to its equity base. This provides protection against the negative effects of leverage (especially a negative difference between return on assets and interest rates), but the trade-off is that the company might also not be taking full advantage of the positive side of leverage when times are good. Management always faces the dilemma of being careful in order to avoid serious losses and taking risks to take advantage of opportunities.

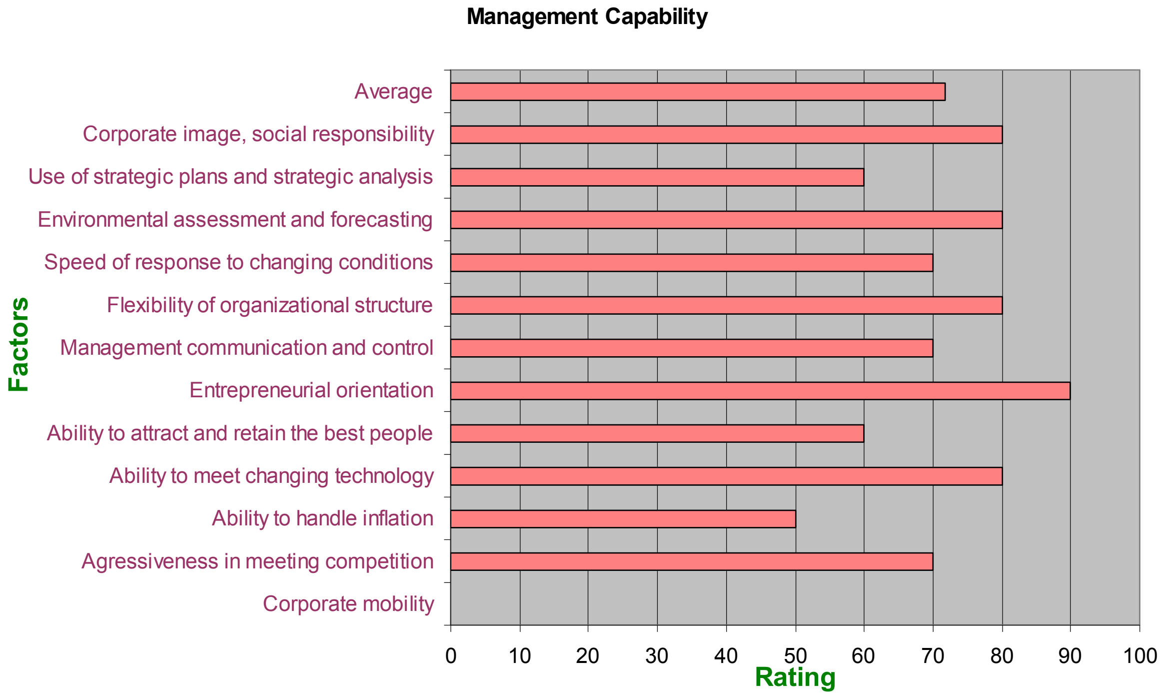
Return on Equity

The Scott formula shows how financial leverage and operating return combine to produce the overall return on equity. It is a reminder of the business fact that the owners' return is partly a function of day-to-day operations and partly a function of the financial structure of the company. Marketing, production, and finance are all important in generating the owners' return.

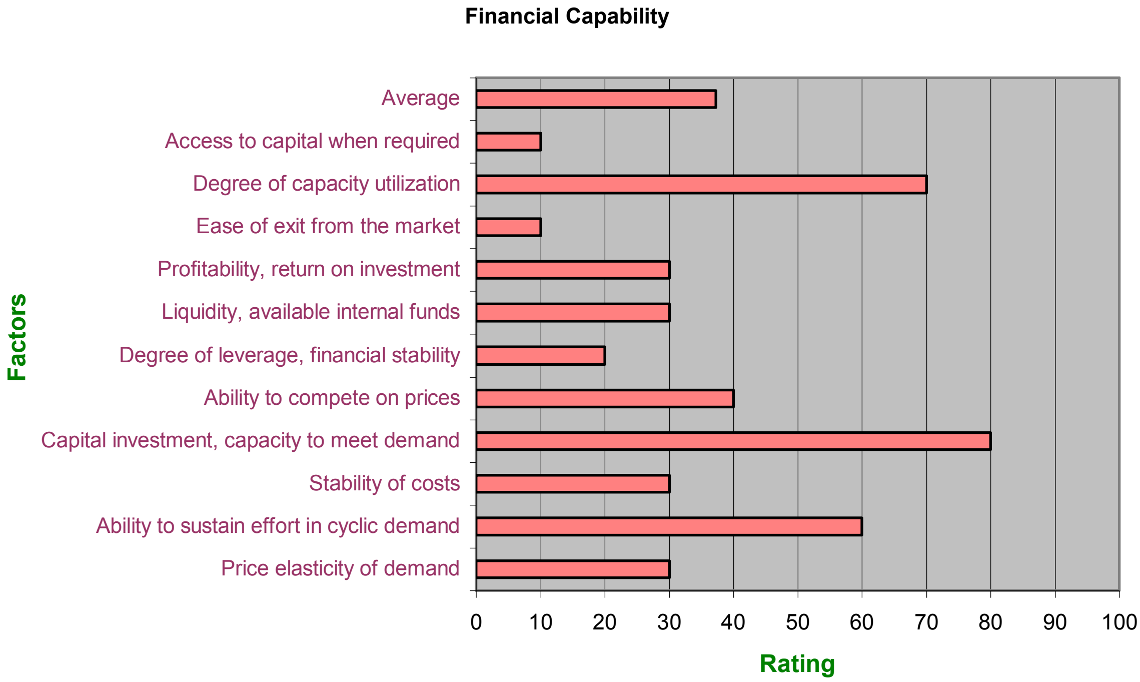
Company Capability Profile

A key element in assessing a company's capability, is knowing a company's strengths and weaknesses. Creating a capability profile can pinpoint strengths and weaknesses, and provide valuable input for future models and tools. The Company Capability Profile (CCP) is a means of assessing a company's managerial, competitive (or marketing), financial, and technical strengths and weaknesses. The following data entry sheets and graphs represent the CCP of a sample company. In grading each characteristic, analysts apply a score between 1 and 100. A score of 45 or less indicates a weakness, a score of 65 or more indicates a strength, and a score between 46 and 64 indicates that the characteristic is neither a strength nor a weakness. If a characteristic is not applicable then NA is entered. The average score indicates if the category represents an overall strength or weakness for the company.

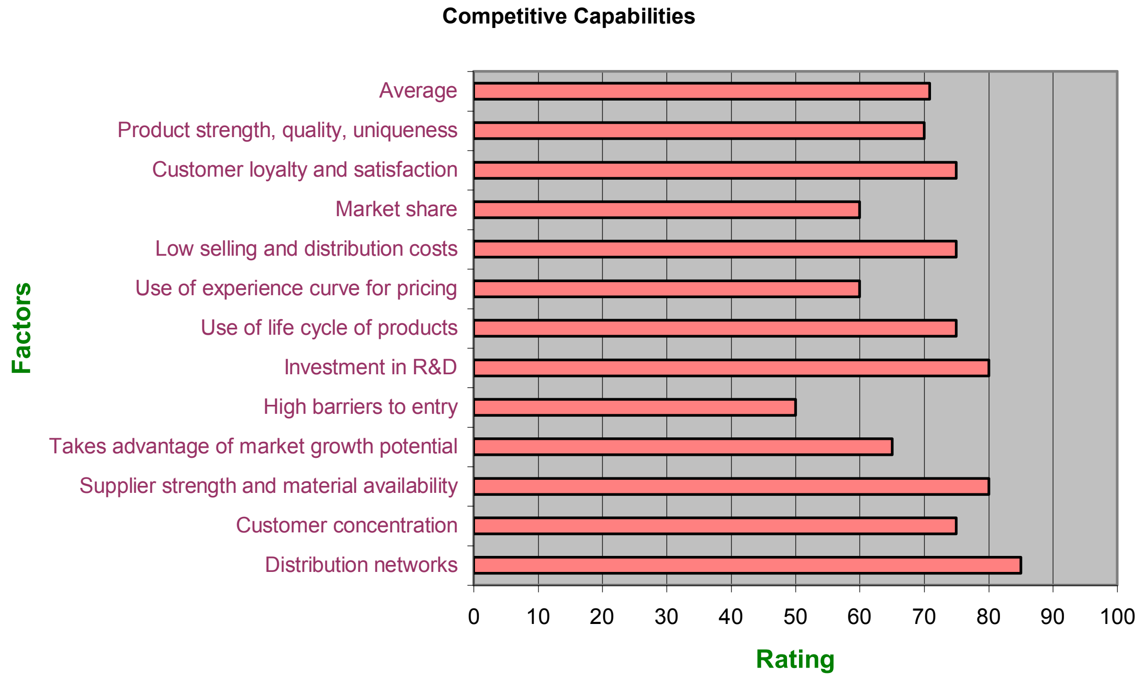
Managerial Factors	Score
Corporate mobility	NA
Aggressiveness in meeting competition	70
Ability to handle inflation	50
Ability to meet changing technology	80
Ability to attract and retain the best people	60
Entrepreneurial orientation	90
Management communication and control	70
Flexibility of organizational structure	80
Speed of response to changing conditions	70
Environmental assessment and forecasting	80
Use of strategic plans and strategic analysis	60
Corporate image, social responsibility	80
Average	71.81818



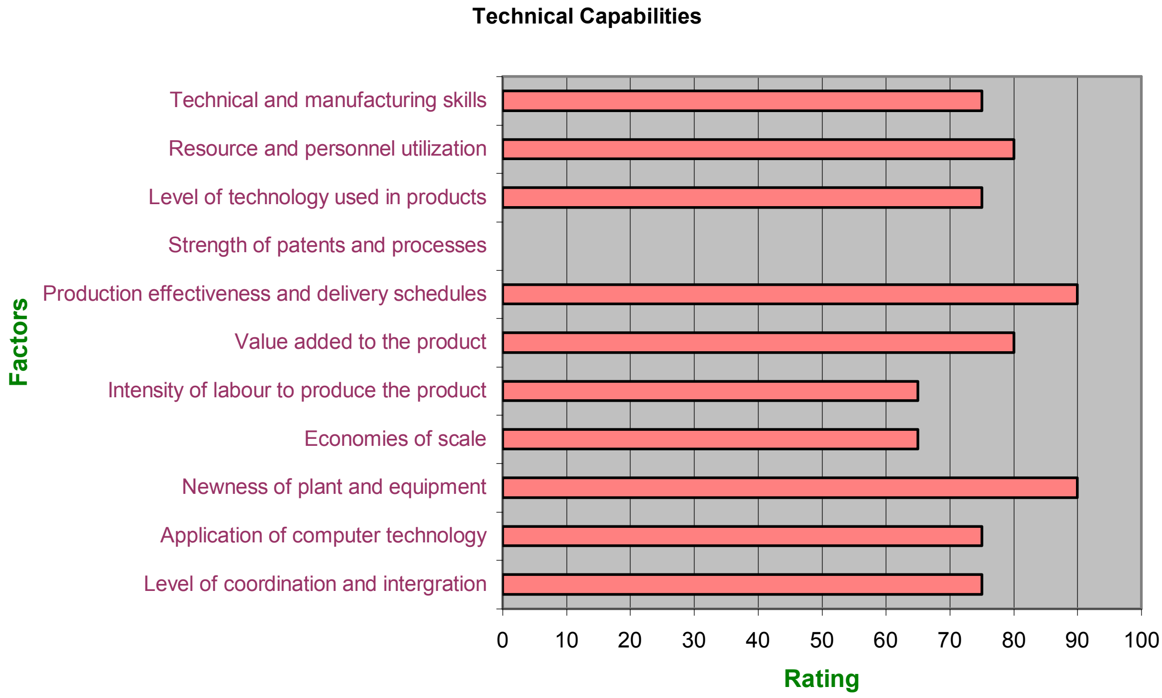
Financial Factors	Score
Price elasticity of demand	30
Ability to sustain effort in cyclic demand	60
Stability of costs	30
Capital investment, capacity to meet demand	80
Ability to compete on prices	40
Degree of leverage, financial stability	20
Liquidity, available internal funds	30
Profitability, return on investment	30
Ease of exit from the market	10
Degree of capacity utilization	70
Access to capital when required	10
Average	37.27273



Competitive Factors	Score
Distribution networks	85
Customer concentration	75
Supplier strength and material availability	80
Takes advantage of market growth potential	65
High barriers to entry	50
Investment in R&D	80
Use of life cycle of products	75
Use of experience curve for pricing	60
Low selling and distribution costs	75
Market share	60
Customer loyalty and satisfaction	75
Product strength, quality, uniqueness	70
Average	70.83333



Technical Factors	Score
Level of coordination and integration	75
Application of computer technology	75
Newness of plant and equipment	90
Economies of scale	65
Intensity of Labour to produce the product	65
Value added to the product	80
Production effectiveness and delivery schedules	90
Strength of patents and processes	NA
Level of technology used in products	75
Resource and personnel utilization	80
Technical and manufacturing skills	75
Average	77



Growth Vector Analysis

Growth vector analysis can be used to determine the position of each of the company's product lines and to identify all of the product/market options possible.

The two dimensions described are the company's product strategy and its market coverage. For companies with many different products, several product/market strategies will apply simultaneously. Different product and market strategies are shown in the table below. If, for example, a company focuses on a single product, it can build a strong distinctive competency that may enable it to dominate a particular market. AMP Corporation, for example, has concentrated on connectors and related tools and has become a leading supplier worldwide. Such a strategy can eventually, however, threaten profitability and growth as the market matures and becomes saturated. On the other hand, diversification into new and perhaps more profitable markets can reduce competitive pressures but may be accompanied by unstable cash flows.

Relative Advantage of Alternative Product Market Strategies

Range of Product Strategies

Product Alternatives	Relative Advantages
Present Product	▪ Builds distinctive competence ▪ Economies of scale ▪ Clarity and unity of purpose ▪ Efficient utilization of resources
Related Products	▪ Broader product appeal ▪ Better use of sales force and distribution network ▪ Motivation from doing something new ▪ Flexibility to respond to changing market conditions
New Products	▪ Reduced competitive pressure ▪ Reduced risk of market saturation ▪ Smaller fluctuations in overall sales

Range of Market Strategies

Market Alternatives	Relative Advantages
Present Market	▪ Maximum market penetration ▪ Possible market leadership ▪ Expertise in specific market or market segment ▪ Market visibility
Related Markets	▪ Stable growth ▪ Stable cash flow requirements ▪ Increased plant utilization ▪ Extension of company's expertise and technology
New Markets	▪ Expansion of company's goodwill and reputation ▪ Reduced competitive pressure ▪ Diversification into more profitable markets ▪ Positive synergistic effects

The following worksheet can be used to plot a company's product strategy. Once the strategy has been plotted, analysts can determine if there are gaps in the strategy and what the key strengths and weaknesses are. Generally, products move from left to right (market penetration to variants or extensions) as the product life changes. This is referred to as new uses of products or services. This shift is done for each of the three market options shown on the left axis of the matrix.

Growth Vector Analysis Matrix

Market Options

Existing market	Market Penetration	Product Variants and Imitations	Product Line Extension
Expanded market	Aggressive Promotion	Market Segmentation, Product Differentiation	Vertical Diversification
New market	Market Development	Market Extension	Conglomerate Diversification
	Present Products	Improved Products	New Products

Product Alternatives

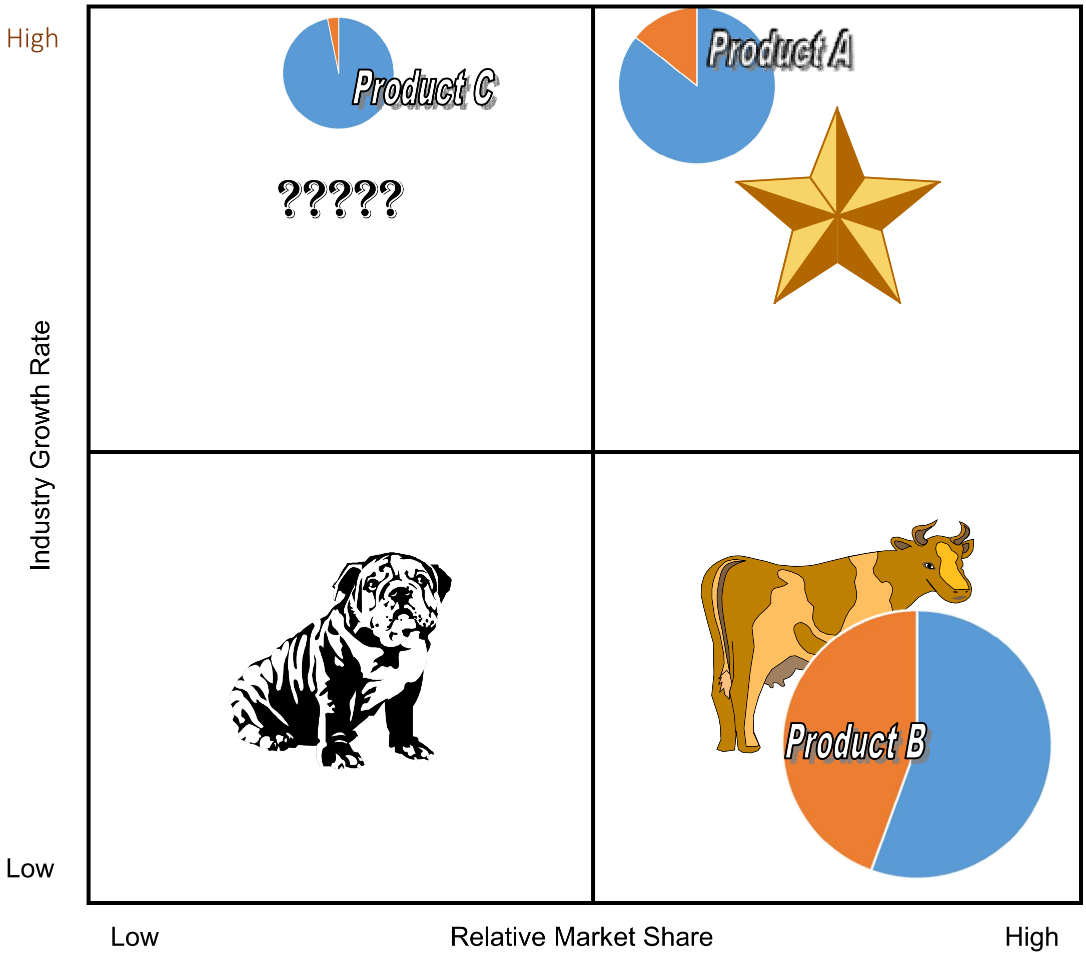
Competitive Portfolio Analysis

The Competitive Portfolio Analysis was designed by the Boston Consulting Group (BCG) and is based on the close relationship between market share and cash generation. What distinguishes Competitive Portfolio Analysis from many of the previous tools is its focus on the specific role of each product or division in the overall strategy of the firm.

The BCG Matrix graphically portrays differences among divisions or products in terms of competitive market share position and industry growth rate. The BCG Matrix allows a multi-divisional or multi-product organization to manage its portfolio by examining the relative share position and the industry growth rate of each division or product relative to all other divisions or products of the organization. Relative market share position is defined as the ratio of market share in a particular industry to the market share held by the largest rival in that industry.

Relative market share position is given on the x-axis of the BCG Matrix. The mid-point on the x-axis usually is set at .50, corresponding to a division that has half the share of the leading firm in the industry. The y-axis represents the industry growth rate in sales, measured in percentage terms. The growth rate percentages on the y-axis range from -20 to +20 percent, with 0.0 being the midpoint. These numerical ranges on the x- and y-axes are the ones most often used but other numerical values could be established as deemed appropriate for particular organizations, industries or products.

Product Portfolio Matrix (BCG Matrix)



An example of a BCG Matrix appears above. Each circle represents a separate division or product. The size of the circle corresponds to the proportion of corporate revenue generated by that business unit or product, and the pie slice indicates the proportion of corporate profits generated by that division or product. Divisions located in **Quadrant I** of the BCG Matrix are called **Question Marks**, those located in **Quadrant II** are called **Stars**, those located in **Quadrant III** are called **Cash Cows**, and those divisions located in **Quadrant IV** are called **Dogs**.

Question Marks

Divisions or products in Quadrant I have a low relative market share position, yet compete in a high-growth industry. Generally these firms' cash needs are high and their cash generation is low. These businesses are called *Question Marks* because the organization must decide whether to strengthen them by pursuing an intensive strategy (market penetration, market development, or product development) or to divest of them.

Stars

Quadrant II businesses or products represent the organization's best long-run opportunities for growth and profitability. Divisions and products with a high relative market share and a high industry growth rate should receive substantial investment to maintain or strengthen their dominant positions. Forward, backward, and horizontal integration; market penetration; market development; product development: and joint ventures are potential strategies.

Cash Cows

Divisions or products positioned in Quadrant III have a high relative market share position but compete in a low-growth industry. Called *Cash Cows* because they generate cash in excess of their needs, they are often milked. Many of today's Cash Cows were yesterday's Stars. Cash Cow divisions should be managed to maintain their strong position for as long as possible. Product development or concentric diversification may be attractive strategies for strong Cash Cows. However, as a Cash Cow becomes weak, retrenchment or divestiture can become more appropriate.

Dogs

Quadrant IV represents a low relative market share position and a slow or no growth industry; they are *Dogs* in the firm's portfolio. Because of their weak internal and external position, these businesses or products are often liquidated, divested, or trimmed down through retrenchment. When a division or product first becomes a Dog, retrenchment can be the best strategy to pursue because many Dogs have bounced back, after strenuous asset and cost reduction, to become viable and profitable. Dogs generally remain in the product portfolio as long as they contribute some positive cash flow and cover their variable costs.

Usage and Benefits

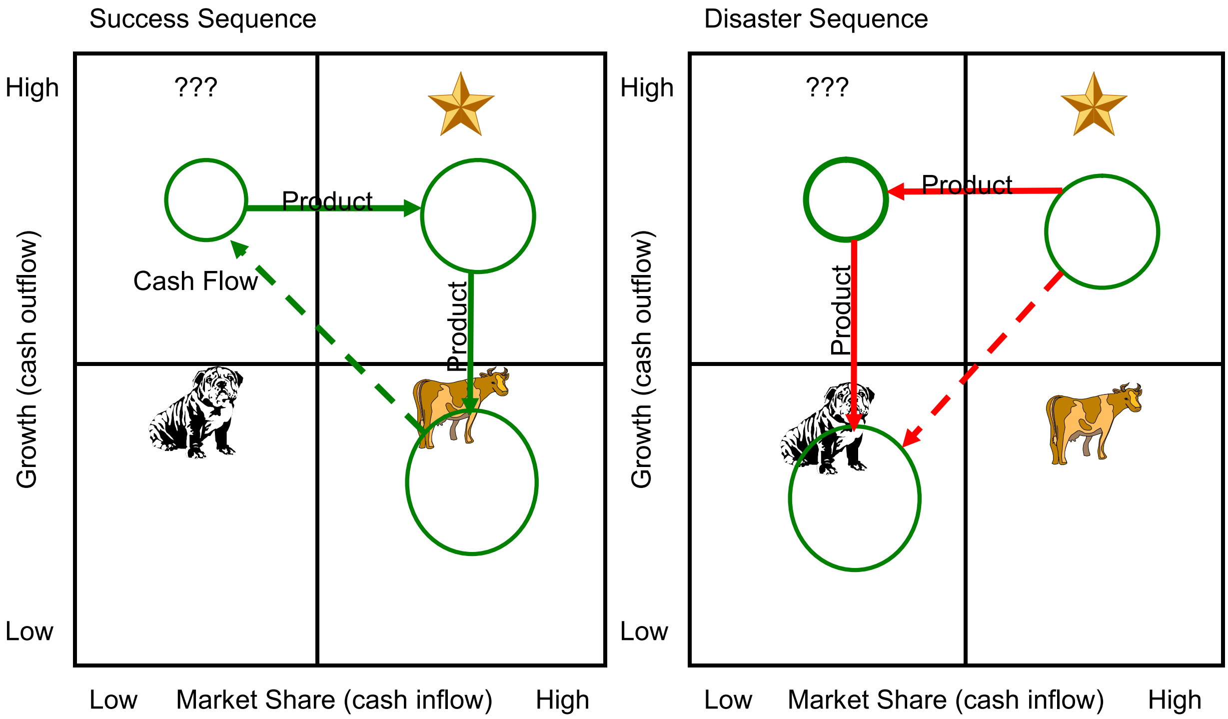
The major benefit of the BCG Matrix is that it draws attention to the cash flow, investment characteristics, and needs of an organization's various divisions or products. Each category represents a different stage in the product life cycle. Products start as question marks in the introductory phase, become stars as growth accelerates, develop into cash cows during the maturity phase, and finally become dogs as growth declines.

The product portfolio analysis can be used to allocate resources among products and to maximize long-run profits. The fundamental idea is to distribute cash generated by the cash cows to other products that will ensure future growth and profitability for the company. A financially balanced product portfolio contains products in each of the four categories. A single, large cash cow might balance off several small stars and perhaps a few question marks and dogs.

Displaying each of a firm's products in a single matrix can help strategic managers to determine the products' competitive standing. To formulate an effective product/market strategy, it may also be necessary to develop product portfolio matrices for major competitors. Comparing the company's product portfolio with those of major competitors enables managers to avoid pitfalls. Attempting to increase a product's market share in a low-growth segment, for example, is very risky if the firm does not have a leadership position either in market share or in product strength.

Strategic managers can also use the product portfolio matrix to track the product life cycle through the four quadrants and adjust strategies as products move from one quadrant to another. As can be seen in the following diagrams, successful product/market strategies bypass the decline/dog quadrant entirely. Products are eliminated from the portfolio or sold off when they evolve into this quadrant and cease to generate cash flow. Losses occur if a new product declines without passing through the growth/star and maturity/cash cow categories. The situation worsens if cash flow is directed from the growth/star quadrant to others. This sequence of events, in which products do not evolve through the growth stage, keeps them from becoming cash cows. The result is seriously reduced profitability.

Product Evolution Sequences



The BCG portfolio approach is used to evaluate products on the basis of their life-cycle phase and to ensure that products are optimally distributed among the four quadrants. If the product portfolio is unbalanced, the flow of products from question marks to stars to cash cows will cause cash flow difficulties.

Strategic managers also use competitive portfolio analysis to establish product-development guidelines and targets, which are then finalized by top management. For example, management may set the cut-off point between low and high growth at 10% annually. Products exceeding this level receive funds for growth; other products are funded at a lower rate.

Life Cycle Analysis

No strategic decision can be made without considering the life cycle phase a company is in or the phase of its products or services. What may be an appropriate strategy for one stage of a product or company's life cycle may be quite ill advised for another stage.

Product Life Cycle

Most entities have a life cycle of four stages: introduction, growth, maturity, and decline (see Industry Life Cycle in the External Assessment section). The introduction stage is characterized by the creation of widespread awareness of the new product. Depending on the uniqueness of the product, the financial requirements of this phase can be extensive. In the second phase, growth, sales, and profits typically increase rapidly. As profits rise, competitors are attracted, and improved products or imitations enter the market. At this point, the product reaches maturity. Price competition intensifies, and growth in sales starts to decline, while profits reach their peak. In the decline phase, both sales and profits go down until the product is discontinued.

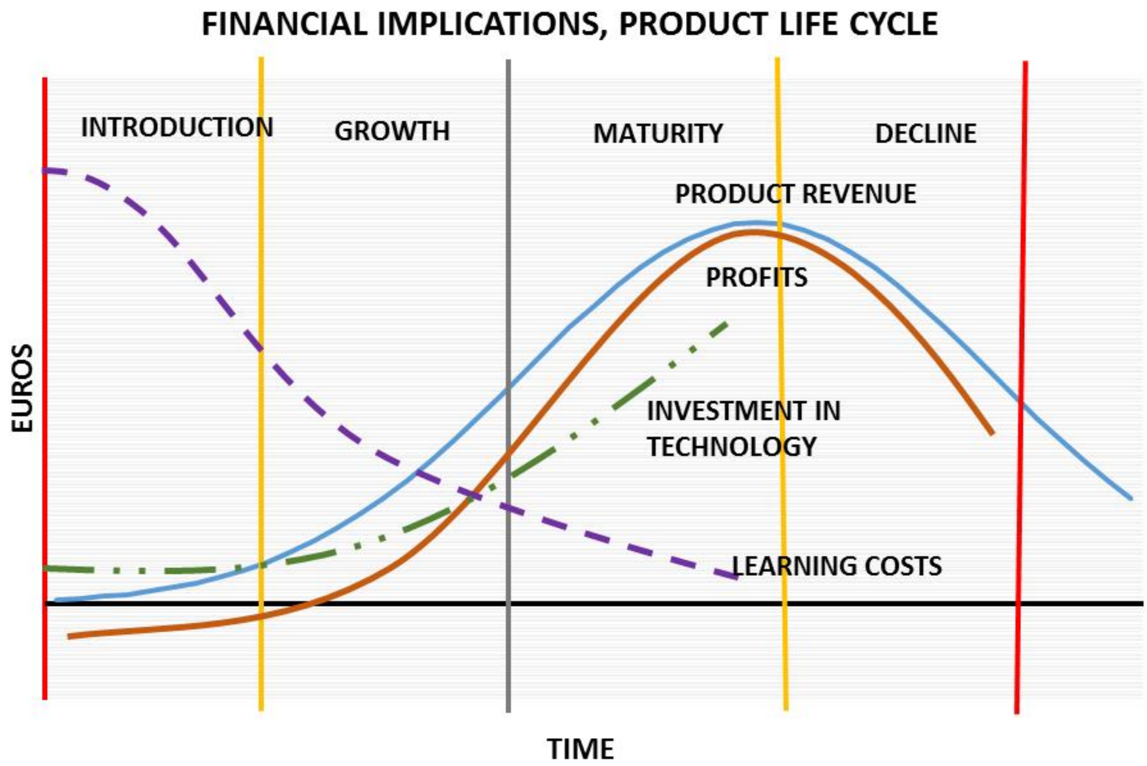
Investment in production capacity and market development takes place during the introduction and, in particular, growth phases. This investment often is not amortized until the product has entered the maturity phase. Companies can make the mistake of discontinuing products too early, before the products have fully contributed to investment recovery. The maximum contribution may well occur in the decline phase of the product life cycle.

The following table shows several sub-strategies appropriate for each stage of the life cycle. In the initiation and growth phases of product life, operational controls should be relatively loose in order to facilitate expansion. At later phases, tighter control is needed to improve efficiency and reduce costs. The maturity phase represents a pivotal point in strategy formulation. During this phase, sales, pricing and market share tend to where competition is focused. Consequently, to realize the product's potential to recover investment, operational procedures are formalized, and the responsibility for product strategy is gradually transferred from sales to finance. At the same time, new products must be introduced into the market if the company is to continue to increase its sales and income. The ability to maintain a stable growth rate depends on an "active" product policy. During the decline stage, finance should closely monitor product viability and once the product can no longer cover the variable costs or resources can be reallocated to more profitable products, the product line should be sold off or discontinued.

Departmental Strategies verses Life Cycle Phase

Product Strategy by Department	Life Cycle Phases			
	Introduction	**Growth**	**Maturity**	**Decline**
Marketing	Create widespread awareness; find acceptance.	Concentrate on brand recognition; find niche; reduce price.	Aggressively promote product, use defensive pricing, defend market share, breakeven.	Phase out product, market extension, or market rejuvenation.
Production	Limit number of designs; develop standards.	Add product variants; centralize production.	Improve product and reduce costs, productivity increases, technology and reengineering for efficiency.	Prune product line, reach capacity/volume balance.
Finance	Plan for high net cash outflow and initial losses, seek lines of credit.	Finance rapid expansion; still have net cash outflows but increasing profits.	Redistribute increasing net cash inflows; declining profits, manage capital assets.	Liquidate unneeded equipment, reinvest profits into business.
Personnel	Staff and train new management, new personnel.	Add personnel in production, plan for overtime, increase training.	Reduce workforce gradually; increase efficiency, productivity incentives.	Reallocate personnel, downsize.
Research and Development	Product/market match, new introduction, engineering changes.	Start developing successor products, product differentiation.	Reduce costs; develop variants.	Withdraw all R&D from product.
Main Focus of Strategy	Product design, market development, Engineering, market penetration.	Sales, production capacity, production technology.	Production efficiency, market share, successor product, consumer loyalty.	Cost control, financial strength, cash flow, portfolio balance, maximum investment recovery.

Financial Implications of the Life Cycle



As one traces the changes that take place in the life cycle of a typical product or company, it becomes obvious that there are significant impacts on the financial performance of a firm as well as on its competitive advantage. As can be seen in the diagram above, the expected revenue for any given product or firm reaches a maximum at what is termed maturity and then declines until the product is totally obsolete or the company ceases to operate. One of the major reasons why products become obsolete is the investments made in R&D that lead to new technology, which helps new products surpass mature products in performance, service, reliability, cost, and so on. A consequence of this technology's forcing out the old product is a decline in profit, despite the lower unit cost that results from the learning curve. The diagram shows that it is necessary to make continuous investment in new products in order to have a sustainable competitive advantage. Companies on the other hand go into decline and cease to operate when management is unable to maintain a competitive advantage or fail to adjust strategies to meet changes in the external environment.

The product life also has a direct impact on financial ratios. As described previously, financial ratios reflect a static perspective on the performance of a firm. But when we look at them from the point of view of the product life cycle, we obtain a dynamic perspective on the significance of the financial ratios. The following table is a summary of the general effects on financial ratios and how they should be interpreted.

Financial Ratios verses Industry Norm

Phase	Introduction	Growth	Maturity	Decline
Impact on financial ratios	Ratios are lower than industry norm.	Ratios are near or higher than industry norm.	Ratios are higher than industry norm.	Ratios are lower than industry norm.

As is apparent, industry norms are at best an average over the life cycle for a product or in some cases a Small Business Unit, where the business unit concentrates on a specific product line.

Competitive Advantage Implications of the Life Cycle

Another significant effect of the product life cycle is the change in strategy needed to sustain a competitive advantage. Depending on the firm's market position, the strategy needs to be continuously modified to meet competitive forces and market demands. The following table shows the changes required as the product moves through its life cycle. This table also shows when investment is required to improve the product's features and when funds are required because of reduced prices or a need to advertise or improve the product. For this reason, cash flow changes in each phase of the product life cycle.

Typical Product/Market Strategies Based on Experience Curve and Product Life Cycle

	Life Cycle Stage			
Market Share	**Introduction**	**Growth**	**Maturity**	**Decline**
High: Market Leader	Sacrifice current profits in order to gain market share as fast as possible.	Reduce prices as costs come down to discourage new competitors.	Hold market share by improving quality and increasing sales effort and advertising; utilize capacity fully.	Maximize cash flow by reducing investment and advertising; allow market share to decline in order to maximize short-term profits.
Market Share	**Introduction**	**Growth**	**Maturity**	**Decline**
Low: Market Follower	Invest to increase market share.	Concentrate on a market segment that can be dominated.	Withdraw from the market or maintain share by keeping prices and costs below those of market leaders.	Withdraw from the market.

Other Implications of the Life Cycle

Key Consideration	**Life Cycle Stage**			
	Introduction	**Growth**	**Maturity**	**Decline**
Staff Profile	Many generalists, risk takers, ability to react, improvise, high change acceptance, results motivated, undisciplined.			Specialists, risk avoiders, anticipative, process motivated, predictable, change resistant, extremely disciplined.
Corporate Culture	Creative culture.	Supportive culture.	Quality culture.	Production culture.
Leadership Style	Inspirational, creativity based. Entrepreneurs.	Supportive, team based, knowledge based. Managers.	Logical, production/people based. Managers.	Directive, production/asset based. Administrators and caretakers.
Leadership Knowledge and Probable Background	Product development knowledge, engineering background.	Product/distribution knowledge, marketing background.	Production and quality knowledge, operations background.	Financial knowledge, accounting or finance background.
Management Risk Profile	Risk takers.	Risk managers.	Risk containers.	Risk avoiders.
Basis of Competitive Advantage	Core competencies.			Core capabilities.
Market Share Importance	Low.	Increasing.	High.	Very high.
Client Relationships	Few, client base unstable.	Increasing, client base stablizing.	Client base is stable.	Decreasing, client base is unstable.
BCG Matrix	Question marks.	Question marks to stars.	Stars to cash cows.	Cash cows to dogs.
Investment Focus	Product based.	Product/distribution based.	Production based.	Withdrawn or refocused.

Key Consideration	**Life Cycle Stage**			
	Introduction	**Growth**	**Maturity**	**Decline**
Typical Financial Problem	Capitalization.	Cashflow.	Leverage and margins.	Cost control.
Critical Product/Production Factors	Product line-up dictates production choice.			Production capabilities define product moves.

Internal SWOT Analysis

The internal strengths and weaknesses analysis draws upon the general finding of all the previous models. Analysts use a standard matrix to list all the strengths and weaknesses of the organization. These lists should include all the findings from the previous models plus any other strengths and weaknesses determined through general observations and/or discussions. In essence, this model represents a summary of the internal assessment findings.

Sample Internal SWOT Analysis

Strengths	Weaknesses
▪ Excellent access to distribution chain.	▪ Poor financial position, debt load.
▪ Strong entrepreneurial orientation.	▪ Access to capital.
▪ Popular product for media and consumers.	▪ Poor cost structure, lack of cost stability
▪ Ability to adapt, good organizational flexibility.	▪ Average team performance.
▪ Strong supplier support.	▪ High reliance on few products.
▪ New stadium and state of the art equipment.	▪ Lack of product differentiation.
▪ Capable of meeting increased demand.	▪ Difficulty in handling cyclical demand.
▪ Forecasting and scanning.	▪ Low customer loyalty.
▪ Good Customer service and support.	▪ Ability to handle inflation, attract the best people is hindered by financial position.
▪ Good use of product life cycles.	▪ Lack of strategic planning and analysis.
▪ Excellent Production effectiveness.	▪ Lack of new market segment development.
▪ High corporate image, and brand recognition.	
▪ Strong ability to add value to product.	
▪ Superior understanding and use of technology.	

Vulnerability Analysis

Another means of assessing threats to a company is the use of a vulnerability analysis. Executives tend to emphasize the strengths and opportunities on which their company's strategy is based and to downplay or even neglect threats and weaknesses. Vulnerability analysis can assist in strategy formulation by having the manager play the devil's advocate—one who criticizes the strategy or plan. Vulnerability analysis begins with the following simple question: What supportive elements, if suddenly taken away, might seriously damage or even destroy the business? Vulnerability analysis involves seven key steps:

1. Identify underpinnings, many of which should come from the strengths section of the internal SWOT.
2. State how removal of an underpinning would threaten the business.
3. State the most conservative consequences of each threat.
4. Rank the impact of worst consequences of each threat.
5. Estimate the probability that each threat will materialize.
6. Rank the company's ability to deal with each threat, should it materialize.
7. Determine whether the company's vulnerability to each threat is extreme or negligible.

The **first** step, the identification of underpinnings, is carried out by a group of top managers using the internal SWOT analysis as well as any other materials that seem appropriate. It is helpful if participants have diverse backgrounds and interests.

After the basic underpinnings have been brought to the surface, the **second** step would be for each member of the group to phrase them in terms of threats to the business.

The **third** step is to establish the most conservative assessment of the consequences, or *down-side risk,* should a potential threat materialize.

Fourth, by imagining a worst-case scenario, managers get a feel for the potential impact of each threat, should it materialize. They can now rank impact on a scale of 0 to 10, where zero denotes no impact on the organization at all, and 10 means catastrophic consequences.

The **fifth** step in vulnerability analysis is to estimate the probability that a particular threat will materialize. Very serious threats often have a remote probability of occurring, which forces managers to clarify their willingness to assume certain business risks. At the least, probability assessment forces managers to decide whether they need more information before they can make a decision. Assessing probabilities is difficult, particularly in situations having a high degree of uncertainty. Strategic planners should be aware that top managers tend to be optimistic in their assessments.

The **sixth** step is to formulate possible reactions, or plans for dealing with threats that materialize. Even if the probability estimate elicits a wait-and-see attitude, this step will result in some degree of preparedness. The firm's ability to react or retaliate can be ranked on a scale of 0 to 10, where zero means defenceless and 10 means that the company can easily absorb the blow.

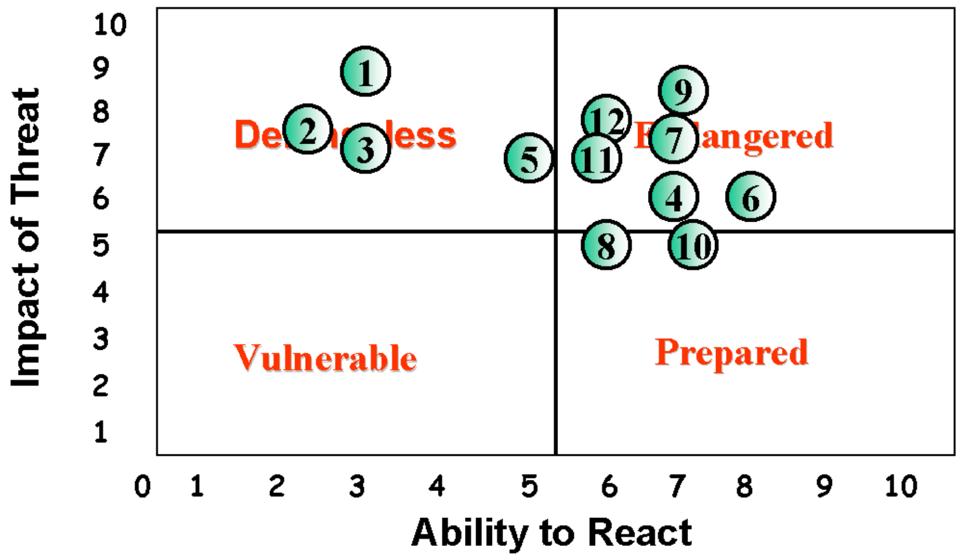
The following table is a sample vulnerability assessment.

#	Assumptions	Beliefs	Consequence	Impact 0 - 10	Probability 0 - 1	Capability 0 - 10	Assessment
1	High brand awareness and satisfaction.	Provides differentiation.	Compete on commodity basis, lower margins.	9	0.5	3	Defenceless
2	Strong financial management and strategic planning.	Able to use leverage effectively.	Reduced earnings or a loss	8	0.4	2	Defenceless
3	Good capacity utilization and production management.	Keeps costs as low as possible.	Reduced margins.	7	0.5	3	Defenceless
4	Product and company flexibility can meet market demands.	Can meet changing consumer demands.	Forced to compete with existing products.	6	0.6	7	Endangered
5	Entrepreneurial, able to react quickly to change.	Able to adapt to industry changes.	Loss of market share.	7	0.5	5	Vulnerable
6	Well positioned in Europe.	Capitalize on growth and market expansion.	Reduced growth potential.	6	0.6	8	Endangered
7	R& D is a core capability.	Development of new products and cost reduction.	Loss of customers with specialized needs, loss of new product capability.	7	0.3	7	Endangered
8	Marketing and market coverage.	Grow market share.	Reduced growth, lack of diversity.	5	0.4	6	Prepared
9	Ability to capitalize on processed food market growth.	Increase margins with increased value added products.	Forced to rely on non-value added products.	8	0.3	7	Endangered
10	Excellent supply and distribution channels.	Reduced cycle time, easier management of vertical risks.	Increased vertical risk, loss of distribution channels.	5	0.1	7	Prepared
11	Modern surface mount facilities.	Lower cost of production.	Higher employee turnover, lower production efficiency.	7	0.1	6	Endangered

#	Assumptions	Beliefs	Consequence	Impact 0 - 10	Probability 0 - 1	Capability 0 - 10	Assessment
12	Exceptional branding efforts.	Driving force in brand awareness.	Lack of a recognized image.	7	0.5	6	Endangered

The **seventh** and final step of vulnerability analysis is to place the company's overall vulnerability to each threat in the context of a *vulnerability assessment graph*, a four-quadrant matrix whose axes consist of rankings of the threat's impact and of the company's ability to react.

Vulnerability Assessment Graph



Any entry in the **Defenceless** quadrant demands immediate attention by top managers. If possible, they should remove such threats by abandoning a particular plan, strategy, or business unit. In cases where this is not possible, managers must take immediate steps to upgrade the company's ability to react, thus moving the threat into **Endangered** quadrant.

Threats in the **Endangered** quadrant are still dangerous, but the company at least has sufficient capabilities to react or retaliate. For threats in this quadrant, managers should develop explicit contingency plans, particularly for those threats that are very likely to materialize.

The threats in the **Vulnerable** quadrant are light to moderate, and the company has very little to do if they materialize. Although explicit contingency plans do not need to be prepared, managers should at least try to monitor these threats for changes that indicate their escalation.

Threats in the last quadrant, **Prepared**, need to be monitored to ensure that the company's ability to react or the impact does not change.

Vulnerability analysis helps managers to identify:

- Underpinnings upon which the firm depends for its continued existence
- Forces that can destroy these basic underpinnings
- Factors that pose a threat and the strength of their potential impact
- The seriousness of the company's vulnerability to each threat
- The company's overall ability to compete effectively in its chosen industry

Internal Factor Evaluation Matrix

A summary step in conducting an internal assessment is to construct an *Internal Factor Evaluation (IFE) Matrix.* This tool summarizes and evaluates the major strengths and weaknesses in the functional areas of a business, as well as providing a basis for identifying and evaluating relationships among those areas. Intuitive judgments are required in developing an *IFE* Matrix, so the appearance of a scientific approach should not be interpreted to mean this is an all-powerful technique. A thorough understanding of the factors included is more important than the actual numbers. Similar to the EFE Matrix, an IFE Matrix can be developed in five steps:

1. List critical success factors as identified in the internal-audit process. Use a total of 10 to 20 internal factors, including both strengths and weaknesses. List strengths first and then weaknesses. Be as specific as possible using percentages, ratios, and comparative numbers. These factors should be taken from the vulnerability and SWOT analyses.

2. Assign a weight to each factor. The weights should range from 0.0 (not important) to 1.0 (all-important). The weight assigned to a given factor indicates the relative importance of the factor to being successful in the firm's industry. Regardless whether a key factor is an internal strength or weakness, factors considered to have the greatest effect on organizational performance should be assigned the highest weights. The sum of all weights must equal 1.0.

3. Assign a 1 to 4 rating to each factor to indicate whether that factor represents a major weakness (rating = 1), a minor weakness (rating = 2), a minor strength (rating = 3), or a major strength (rating = 4). Ratings are thus company-based, whereas the weights in Step 2 are industry-based.

4. Multiply each factor's weight by its rating to determine a weighted score for each variable.

5. Sum the weighted scores for each variable to determine the total weighted score for the organization.

Regardless of how many factors are included in an IFE Matrix, the total weighted score can only range from a low of 1.0 to a high of 4.0, with the average score being 2.5. Total weighted scores well below 2.5 characterize organizations that are weak internally whereas scores significantly above 2.5 indicate a strong internal position. The number of factors has no effect upon the range of total weighted scores because the weights always sum to 1.

When a key internal factor is both a strength and a weakness, the factor should be included twice in the IFE Matrix, and a weight and rating should be assigned to each statement. For example, a company may have high capacity utilization on existing production equipment that gives them a cost/volume advantage over the competition but, because of volume, the life expectancy of that same equipment may be significantly reduced leading to replacement and potential downtime costs. The following is a sample IFE Matrix.

Current Key Internal Factors				
Strengths		Weight	Rating	Score
1	Excellent access to distribution chain.	0.05	4	0.2
2	Strong entrepreneurial orientation.	0.06	4	0.24
3	Popular product for media and consumers.	0.05	4	0.2
4	Ability to adapt and good organizational flexibility.	0.03	3	0.09
5	Strong supplier support.	0.02	4	0.08
6	New state of the art production equipment.	0.06	4	0.24
7	Capable of meeting increased demand.	0.05	4	0.2
8	Forecasting and scanning.	0.03	4	0.12
9	Good Customer service and support.	0.05	3	0.15
10	Good use of product life cycles.	0.02	3.5	0.07
11	Excellent Production effectiveness.	0.05	4	0.2
12	High corporate image, and brand recognition.	0.05	3	0.15
13	Strong ability to add value to product.	0.04	4	0.16
14	Superior understanding and use of technology.	0.04	4	0.16
Total Strengths		**0.6**		**2.26**
Weaknesses		Weight	Rating	Score
1	High debt load and service cost.	0.05	1	0.05
2	No access to capital, no internal funds.	0.03	1	0.03
3	Poor cost structure, lack of cost stability	0.03	1	0.03
4	Average team performance.	0.02	2	0.04
5	High reliance on few products.	0.03	2	0.06
6	Lack of product differentiation.	0.04	2	0.08
7	Difficulty in handling cyclical demand.	0.05	2	0.1
8	Low customer loyalty, cannot compete on price	0.04	1.5	0.06
9	Low ability to handle inflation and attract the best people.	0.03	1	0.03
10	Lack of strategic planning and analysis.	0.02	2	0.04
11	Lack of new market segment development.	0.06	1	0.06
Total Weaknesses		**0.4**		**0.58**
Total for Key Internal Factors		**1**		**2.84**

In multidivisional firms, each autonomous division or strategic business unit should construct an IFE Matrix. Divisional matrices can then be integrated to develop an overall corporate IFE Matrix.

Matching Stage

The matching stage of the strategy-formulation framework consists of seven techniques: the SWOT Matrix, the SPACE Matrix, the Strategic Options and Generic Strategies model, the Product Portfolio Matrix, the Internal-External Matrix, the Grand Strategy Matrix, and the Directional Policy Matrix. These tools rely upon information derived from the input stage to match external opportunities and threats with internal strengths and weaknesses. *Matching* external and internal critical success factors is the key to effectively generating feasible alternative strategies. For example, a firm with excess working capital (an internal strength) digital data security could take advantage of the explosive growth in the digital forensics market (an external opportunity) by acquiring a firm in that domain of by allocating research and development funds for internal product development. This example portrays simple one-to-one matching. In most situations, external and internal relationships are more complex, and the matching requires multiple alignments for each strategy generated.

Other noteworthy methods not covered in this supplement include McKinsey's industry attractiveness/company strength matrix and General Electric's stoplight strategy. In each of these methods, one of the axes of the matrix measures the overall attractiveness of the industry in which the company operates, and the other axis represents the company's ability to compete in its market(s). The Directional Policy Matrix, which uses market potential and company capability as its two dimensions, is perhaps more specific with respect to strategic implications.

Any organization, whether military, product-oriented, service-oriented, governmental, or even athletic, must develop and execute good strategies to win. A good offence without a good defence, or vice versa, usually leads to defeat. Developing strategies that use strengths to capitalize on opportunities could be considered an offence, whereas strategies designed to improve upon weaknesses while avoiding threats could be termed defensive. Every organization has some external opportunities and threats and internal strengths and weaknesses that can be aligned to formulate feasible alternative strategies.

SWOT Matrix

The SWOT *Matrix* is an important matching tool that helps managers develop four types of strategies: Strength - Opportunity (**SO**) Strategies. Weakness - Opportunity (**WO**) Strategies, Strength - Treat (**ST**) Strategies, and Weakness – Threat (**WT**) Strategies. Matching key external and internal factors is the most difficult part of developing a SWOT Matrix and requires good judgment, there is no one best set of matches.

SO Strategies use a firm's internal strengths to take advantage of external opportunities. All managers would like their organizations to be in a position where internal strengths can be used to take advantage of external trends and events. Organizations generally will pursue WO, ST, or WT Strategies in order to get into a situation where they can apply SO Strategies. When a firm has major weaknesses, it will strive to overcome them and make them strengths. When an organization faces major threats, it will seek to avoid them in order to concentrate on opportunities.

WO Strategies aim at improving internal weaknesses by taking advantage of external opportunities. Sometimes key external opportunities exist, but a firm has internal weaknesses that prevent it from exploiting those opportunities. For example, there may be a high demand for electronic devices to control the amount and timing of fuel injection in automobile engines (opportunity), but a certain auto parts manufacturer may lack the technology required for producing these devices (weakness). One possible WO Strategy would be to acquire this technology by forming a joint venture with a firm having competency in this area. An alternative WO Strategy would be to hire and train people with the required technical capabilities.

ST Strategies use a firm's strengths to avoid or reduce the impact of external threats. This does not mean that a strong organization should always meet threats in the external environment head-on. A recent example of ST Strategy occurred when a major North American electronics manufacturer used an excellent legal department (a strength) to collect nearly €700 million in damages and royalties from nine Japanese and Korean firms that infringed on technology patents (threat). Rival firms that copy ideas, innovations, and patented products are a major threat in many industries. This is a major problem for many firms.

WT Strategies are defensive tactics directed at reducing internal weaknesses and avoiding environmental threats. An organization faced with numerous external threats and internal weaknesses may indeed be in a precarious position. In fact, such a firm may have to fight for its survival, merge, retrench, declare bankruptcy, or choose liquidation.

A schematic representation of the SWOT Matrix is provided in Figure 6-3. Note that a SWOT Matrix is composed of nine cells. As shown, there are four key factor cells, four strategy cells, and one cell that is always left blank (the upper left cell). The four strategy cells, labelled *SO, WO, ST,* and *WT,* are developed after completing four key factor cells, labelled *S*, *W, 0,* and *T.* There are eight steps involved in constructing a SWOT Matrix:

1. List the firm's key external opportunities.
2. List the firm's key external threats.
3. List the firm's key internal strengths.
4. List the firm's key internal weaknesses.
5. Match internal strengths with external opportunities and record the result SO Strategies in the appropriate cell.
6. Match internal weaknesses with external opportunities and record the resultant WO Strategies.
7. Match internal strengths with external threats and record the resultant Strategies.
8. Match internal weaknesses with external threats and record the resultant WT Strategies.

The purpose of each matching tool is to generate feasible alternative strategies, not to select or determine which strategies are best! Not all of the strategies developed in the SWOT Matrix, therefore, will be selected for implementation. A sample SWOT Matrix for Cineplex Odeon Theatres, a large cinema company, follows:

Cineplex Odeon SWOT Matrix

	STRENGTHS—S	**WEAKNESSES—W**
	1. Positive cash flow 3 years running 2. Double the industry concession sales rate 3. Many cost-cutting measures in place 4. Upgraded audio in many places 5. Profitable in Canada 6. Located in large population centres	1. Poor labour relations 2. Current ratio of 0.25 3. Flat operating cost through falling revenue 4. Triple the G&A expenses of on-demand video 5. Significant losses in the United States 6. Management concentrating on market share 7. Restrictive covenants set by lenders
OPPORTUNITIES - 0 1. Approached by most major chains for potential merger 2. Recovering economies in Europe 3. Global growth rate of 4.3% 4. Foreign per capita income growth outpacing the United States	**SO STRATEGIES** 1. Open theatres in Eastern Europe (S1, 02,03, 04)	**WO STRATEGIES** 1. Pursue merger with other Cinemas (01,02, W3, W4, W5, W6)
THREATS - T 1. In-home video, global growth rate of 5.1% 2. Aging population 3. Dependence on successful movies 4. Switch from bid to allocation for licenses 5. Seasonality for movie releases 6. Video pirating and internet sites in uncontrolled markets	**ST STRATEGIES** 1. Expand into on-demand market (S1, T1, T3, T5, T6) 2. Convert theatres to multidimensional entertainment complexes (S1, S2, S4, S6 T3, T5, T6)	**WT STRATEGIES** 1. Reduce corporate overhead (W3, W4, T3, T5, T6) 2. Divest U.S. operations (T6, W2, W3, W4, W5, W6)

The strategy-formulation guidelines provided in the section on *Types of Strategies* can enhance the process of matching key external and internal factors. For example, when an organization has both the capital and human resources needed to distribute its own products (internal strength) and distributors are unreliable, costly, or incapable of meeting the firm's needs (external threat), forward integration can be an attractive ST Strategy. When a firm has excess production capacity (internal weakness) and its basic industry is experiencing declining annual sales and profits (external threat), then concentric diversification can be an effective WT Strategy. However, it is important to use specific, rather than general strategy terms when developing a SWOT Matrix. Including specific targets, SBU's, products etcetera is extremely helpful. In addition, it is useful to include the "S1, 02" type notation after each strategy in the Matrix. This notation reveals the rationale for each alternative.

Strategic Position and Action Evaluation

Strategic position and action evaluation *(SPACE)* is used to determine the appropriate strategic posture for a firm and each of its individual businesses. It is an extension of the two-dimensional portfolio methods, such as the BCG product portfolio.

The SPACE approach is an attempt to overcome some of the limitations inherent in the two axis methods. SPACE combines four key dimensions in the matching process. These dimensions are: Environmental Stability, Industry Strength, Competitive Advantage, and Financial Strength. Financial strength and competitive advantage are the two major determinants of a company's strategic position, whereas industry strength and environmental stability characterize the strategic position of the entire industry. In the SPACE chart, these factors are rated on a scale of +6 to -6. Each dimension is viewed as a composite of several factors, which are evaluated separately. By including a large number of factors, the manager can examine a particular strategic alternative from several perspectives and will, therefore, be in a better position to select an appropriate strategy.

A company's financial strength is important when there are adverse economic conditions, such as rapid inflation or high interest rates. Equipped with a "cushion" to ease the pinch of difficult times, the financially strong company is in an excellent position to diversify into more attractive industries or to finance aggressive moves in its current industry at the expense of weaker competitors.

A company that enjoys advantages over its competitors in terms of market share, cost, or technology is usually able to maintain a higher profit margin as well. This competitive advantage can become critical in a declining market, where the marginally profitable firm finds it difficult to survive.

In an expanding market, an industry's financial and operating strength helps to maintain or increase the market's momentum, and even the marginal competitor can find a niche in such a situation. As the market's growth slows, however, the competitive climate in an industry deteriorates, and a firm finds it necessary to protect its competitive position. Therefore, industry strength can offset a company's competitive position. Similarly, environmental stability can mitigate a firm's lack of financial strength. On the other hand, if a firm in a turbulent environment does not have a sound financial position, it finds survival very difficult.

The SPACE model uses each of the key dimensions to arrive at an aggressive, competitive, conservative, or defensive strategic posture for the firm. These postures in turn can be translated into generic competitive strategies, thus helping the manager define the appropriate strategic thrust for a business: overall cost leadership, differentiation, focus, or defensiveness.

1. Factors determining Environmental Stability (ES)

- Technological changes
- Rate of inflation
- Demand variability
- Price range of competing products
- Barriers to entry into market
- Competitive pressure/rivalry
- Price elasticity of demand
- Pressure from substitutes

2. Factors determining Industry Strength (IS)

- Growth potential
- Profit potential
- Financial stability
- Technological know-how
- Resource utilization
- Capital intensity
- Ease of entry into market
- Productivity; capacity utilization
- Vendors' bargaining power

3. Factors determining Competitive Advantage (CA)

- Market share
- Product or service quality
- Product life cycle
- Product replacement cycle
- Customer loyalty
- Competition's capacity utilization
- Technological know-how
- Vertical integration
- Speed of new-product introductions

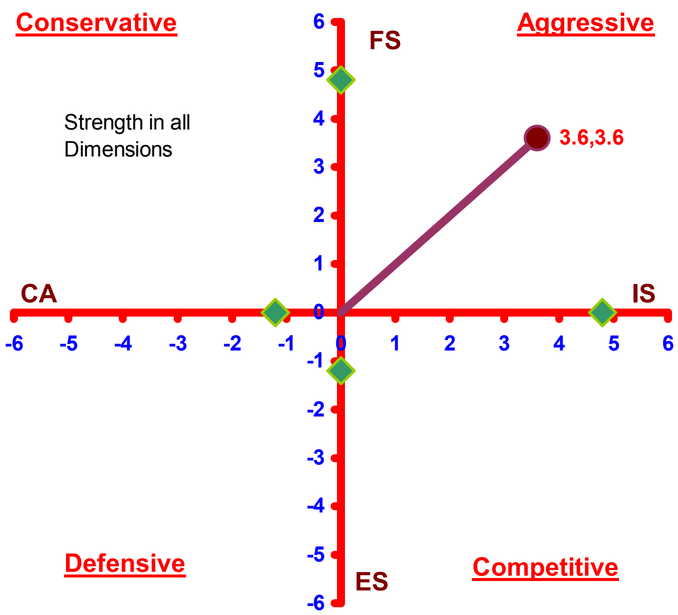
4. Factors determining Financial Strength (FS)

- Return on investment
- Leverage
- Liquidity
- Capital required versus capital available
- Cash flow
- Ease of exit from market
- Risk involved in business
- Inventory turnover
- Use of economies of scale and experience

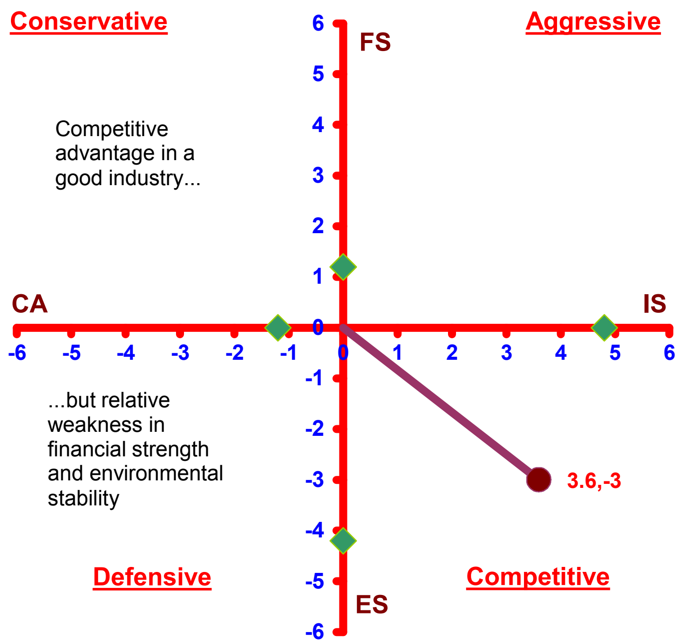
To apply the model, a manager reviews all of the data from the internal and external assessments and assigns appropriate numerical values to each of the factors. The averages determined for each group of factors are then plotted in the SPACE chart. By adding the two scores on the axes opposite each other one can obtain a directional vector that points to a specific location in the chart. It is important to recognize that the SPACE chart is a summary display and that each factor should also be analysed individually. In particular, factors with very high or very low scores should receive special attention.

Strategic Postures

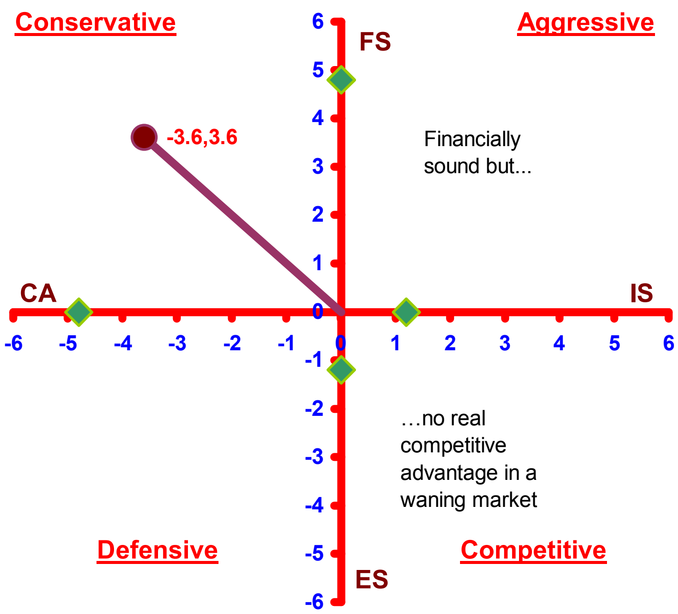
***Aggressive Posture**.* This posture is typical in an attractive industry with little environmental turbulence. The company enjoys a definite competitive advantage, which it can protect with financial strength. The critical factor is entry of new competition. Firms in this situation should take full advantage of opportunities, look for acquisition candidates in their own or related industries, increase market share, and concentrate resources on products that have a definite competitive edge.



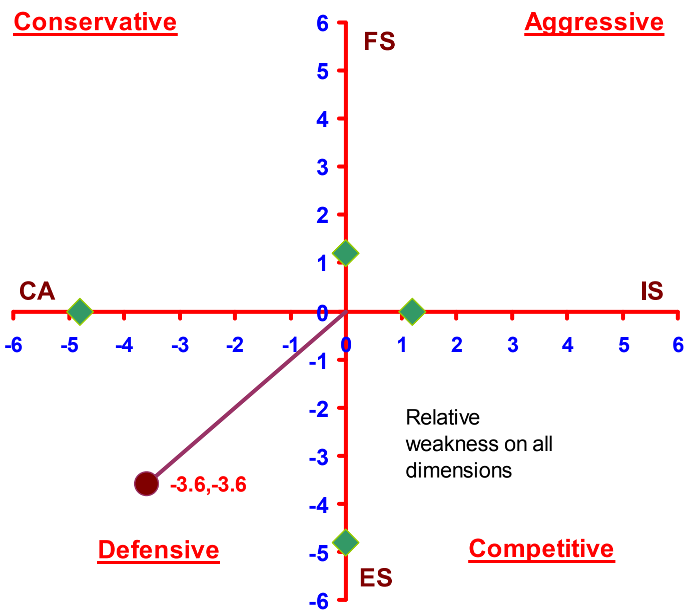
Competitive Posture. This posture is typical in an attractive industry. The company enjoys a competitive advantage in a relatively unstable environment. The critical factor is financial strength. Firms in this situation should acquire financial resources to increase marketing thrust, add to the sales force, extend or improve the product line, invest in productivity, reduce costs, protect competitive advantage in a declining market, and attempt to merge with a cash-rich company.



Conservative Posture. This posture is typical in a stable market with low growth. Here the company focuses on financial stability. The critical factor is product competitiveness. Firms in this situation should prune the product line, reduce costs, focus on improving cash flow, protect competitive products, develop new products, and gain entry into more attractive markets.

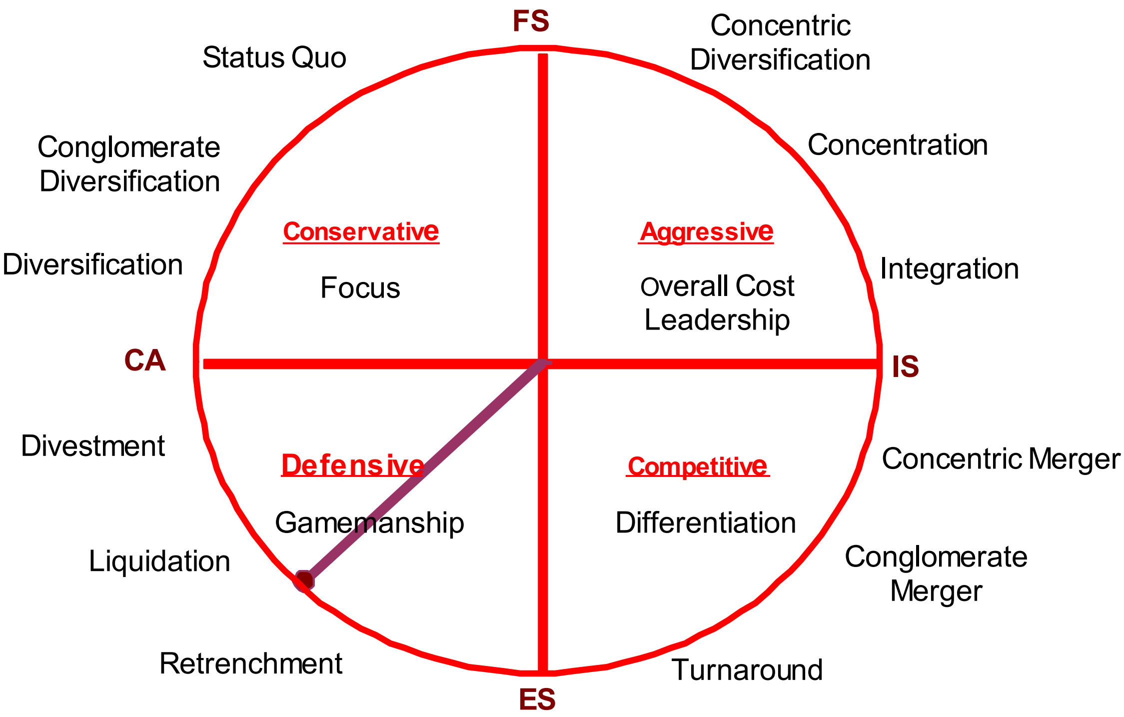


Defensive Posture. This posture is typical of an unattractive industry in which the company lacks a competitive product and financial strength. The critical factor is competitiveness. Firms in this situation should prepare to retreat from the market, discontinue marginally profitable products, reduce costs aggressively, cut capacity, and defer or minimize investments.



Strategic Options and Generic Strategies

The Strategic Options and Generic Strategies is, in essence, a re-plot of the SPACE data. The major difference is that this model endeavours to match the vector derived from the four critical factors (FS, IS, ES, CA) to the use of Porter's three generic strategies or a fourth strategy, Gamesmanship.



Product Portfolio Matrix

Analysts take the BCG matrix that was compiled during the internal assessment phase and extract any viable product oriented strategies. These strategies could be based on:

- Adding new or existing products to the portfolio through an intensive, integration or diversification strategy;
- Eliminating products from the portfolio through a retrenchment or divestment strategy; and/or
- Focusing on transitioning current products in the portfolio from one quadrant to another.

The general principle is to balance the portfolio.

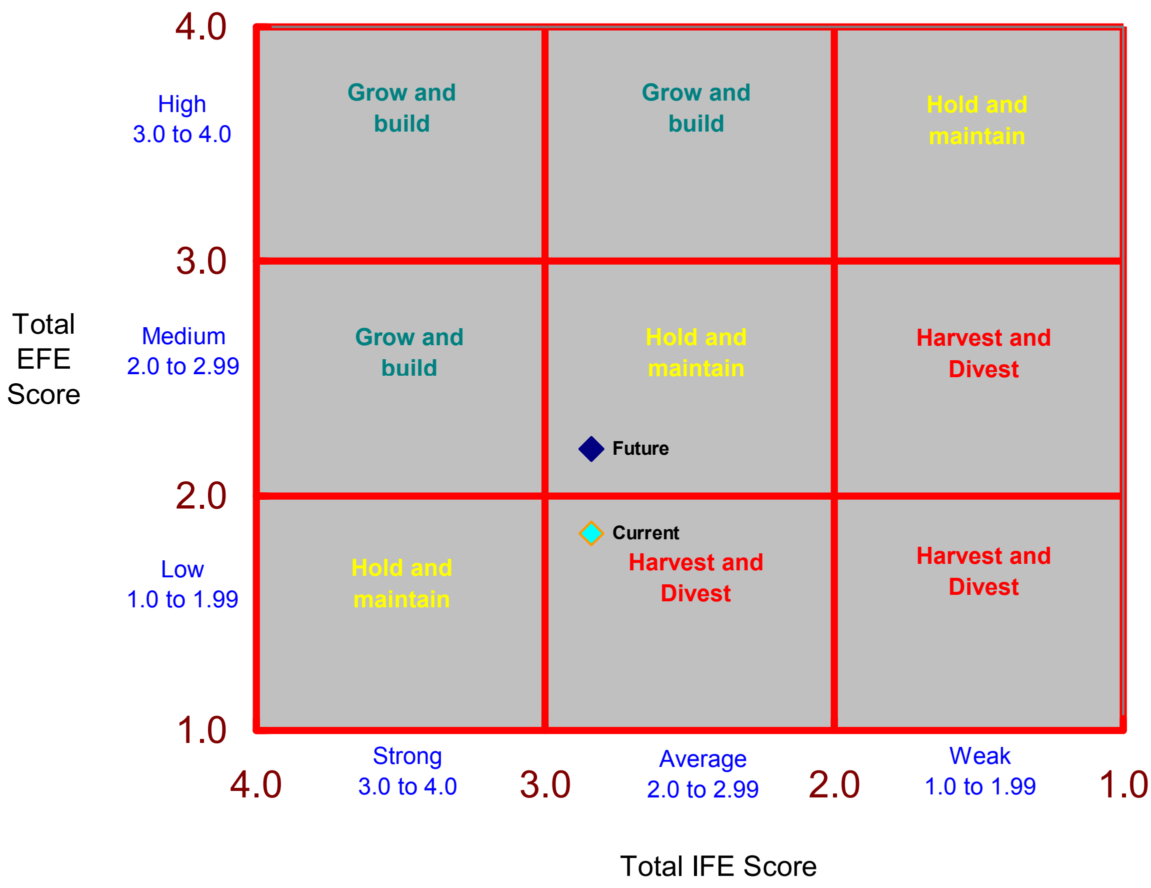
The Internal-External Matrix

The *Internal-External (IE) Matrix* positions an organization's various divisions in a nine-cell display. The IE Matrix is similar to the BCG Matrix in that both tools involve plotting an organization's divisions or products in a schematic diagram; this is why they are both called portfolio matrices. Also, the size of each circle can be used to represent the percentage sales contribution of each division, and pie slices can reveal the percentage profit contribution.

There are, however, some important differences between the BCG Matrix and IE Matrix. First, the axes are different. Also, the IE Matrix requires more information about the divisions than the BCG Matrix. Further, the strategic implications of each matrix are different. A common practice is to develop a BCG Matrix and an IE Matrix for the present and then develop projected matrices to reflect expectations of the future. This before-and-after analysis forecasts the expected effect of strategic decisions on an organization's portfolio of divisions. With smaller organizations the IE Matrix only plots the overall evaluation of the company; however, the implications are the same.

The IE Matrix is based on two key dimensions: the IFE total weighted scores on the x-axis and the

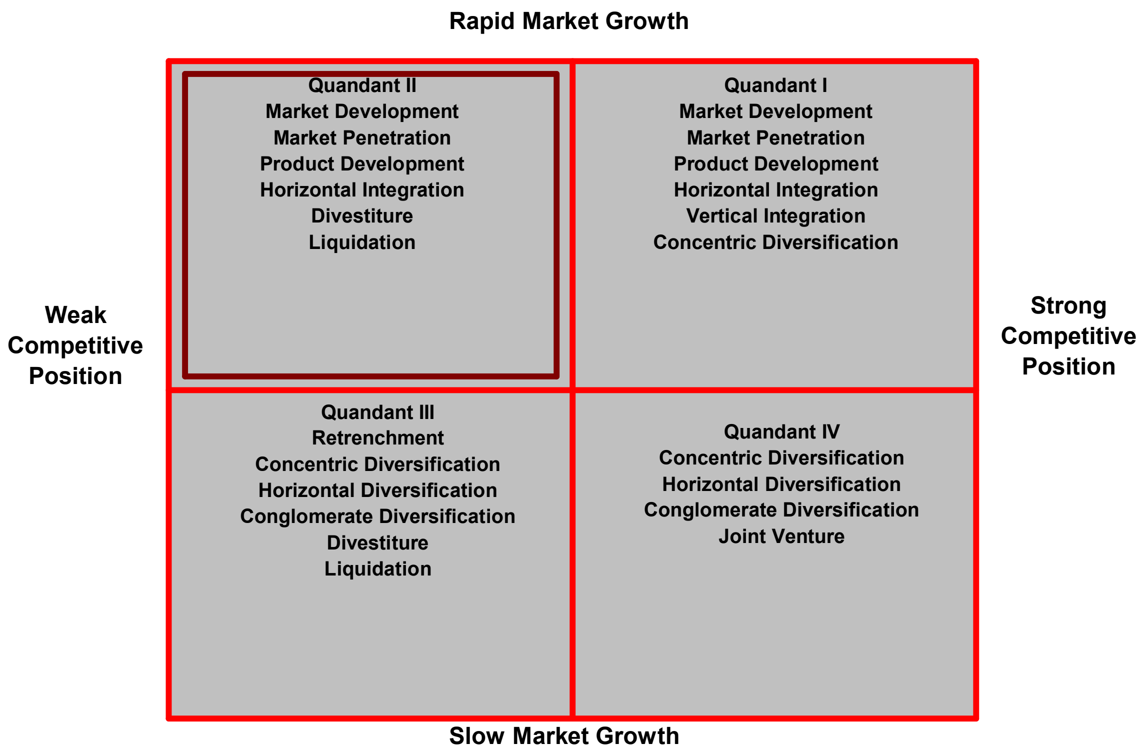
EFE total weighted scores on the y-axis. Each division of an organization should construct an IFE Matrix and an EFE Matrix for its part of the organization. The total weighted scores derived from the divisions allow construction of the corporate-level IE Matrix. On the x-axis of the IE Matrix, an IFE total weighted score of 1.0 to 1.99 represents a weak internal position; a score of 2.0 to 2.99 is considered average; and a score of 3.0 to 4.0 is strong. Similarly, on the y-axis, an EFE total weighted score of 1.0 to 1.99 is considered low; a score of 2.0 to 2.99 is medium; and a score of 3.0 to 4.0 is high.



The IE Matrix can be divided into three major regions that have different strategy implications. First, the prescription for divisions or a company that falls into cells II, IV, or I can be described as *grow and build.* Intensive (market penetration, market development, and product development) or integrative (backward integration, forward integration, and horizontal integration) strategies can be most appropriate for these divisions or company. Second, divisions that fall into cells III, V, or VII can be managed best with *hold and maintain* strategies; market penetration and product development are two commonly employed strategies for these types of divisions or company. Third, a common prescription for divisions or a company that falls into cells VI, VIII, or IX is *harvest or divest.* Successful organizations are able to achieve a portfolio of businesses positioned in or around cell I in the IE Matrix.

Grand Strategy Matrix

In addition to the SWOT Matrix, SPACE Matrix, BCG Matrix, and IE Matrix, the *Grand Strategy Matrix* has become a popular tool for formulating alternative strategies. All organizations can be positioned in one of the Matrix's four strategy quadrants. A firm's divisions likewise could be positioned separately. The Grand Strategy Matrix is based on two evaluative dimensions: competitive position and market growth. Appropriate strategies for an organization to consider are listed in sequential order of attractiveness in each quadrant of the matrix. Data for determining which quadrant a company or business unit is in can be taken directly from the internal and external analyses or extracted from the SPACE model.



Firms located in Quadrant I of the Grand Strategy Matrix are in an excellent strategic position. For these firms, continued concentration on current markets (market penetration and market development) and products (product development) are appropriate strategies. It is unwise for a Quadrant I firm to shift notably from its established competitive advantages. When a Quadrant I organization has excessive resources, then backward, forward, or horizontal integration may be effective strategies. When a Quadrant I firm is too heavily committed to a single product, then concentric diversification may reduce the risks associated with a narrow product line. Quadrant I firms can afford to take advantage of external opportunities in many areas: they can take risks aggressively when necessary.

Firms positioned in Quadrant II need to seriously evaluate their present approach to the marketplace. Although their industry is growing, they are unable to compete effectively, and they need to determine why the firm's current approach is ineffectual and how the company can best change to improve its competitiveness. Because Quadrant II firms are in a rapid-market-growth industry, an intensive strategy (as opposed to integrative or diversification) is usually the first option that should be considered. However, if the firm is lacking a distinctive competence or competitive advantage, then horizontal integration is often a desirable alternative. As a last result, divestiture or liquidation should be considered. Divestiture can provide funds needed to acquire other businesses or buy back shares.

Quadrant III organizations compete in slow-growth industries and have weak competitive positions. These firms must make some drastic changes quickly to avoid further demise and possible liquidation. Extensive cost and asset reduction (retrenchment) should be pursued first. An alternative strategy is to shift resources away from the current business into different areas. If all else fails, the final options for Quadrant III businesses are divestiture or liquidation.

Finally, Quadrant IV businesses have a strong competitive position but are in a slow-growth industry. These firms have the strength to launch diversified programs into more promising growth areas. Quadrant IV firms have characteristically high cash flow levels and limited internal growth needs and can often pursue concentric, horizontal, or conglomerate diversification successfully. Quadrant IV firms also may pursue joint ventures.

Directional Policy Matrix

The Directional Policy Matrix (DPM) is a method of business portfolio analysis formulated by Shell International Chemical Company. It has nine cells in which businesses are located depending upon their scores on each of the two axes: Company Capability derived from the internal assessment and Market Potential, derived from the external assessment.

The individual cell labels represent possible strategic choices most appropriate for the firm, given its score on each of the two axes. The DPM can thus be used to identify strategies for single businesses as well as for plotting combinations of units in multi-business or multi-product firms. Locating competitors on the DPM can provide useful insights into the nature of corporate-level strategic configurations. However, there is room for error in the positioning of a firm or product on the two axes, and thus the DPM location should be interpreted with an open mind and not in isolation.

Company Capability	Unattractive	Average	Attractive
High	Diversification	Market Segmentation	Market Leadership; Innovation
Normal	Phased Withdrawal; Merger	Maintenance of Position; Market Penetration	Expansion; Product Differentiation
Low	Divestment	Imitation; Phased Withdrawal	Cash Generation

Market Potential

Strategic Alternatives Matrix

The last stage in the matching process is to compile a Strategic Alternative Matrix. The matrix is used to select the top two or three strategies based on their continuity across models. The first step in the process is to define in generic terms all of the strategies generated by the matching tools. These strategy alternatives should be listed under the Strategy column in the matrix. The next step is to determine which of the models support each of the listed strategic alternatives. Support for a given alternative is indicated by the word “yes” in the appropriate cell. Once all of the alternatives have been measured for support, the three with the most “yes” scores are selected for the decision stage.

Strategic Alternatives Matrix

Strategy	SWOT MATRIX	SPACE / Generic	Product Portfolio	IE Matrix	DPM	Grand Strategy
Strategy Alternative 1	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
Strategy Alternative 2	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
Strategy Alternative 3	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
Strategy Alternative 4	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No

Decision Stage

Stakeholder Analysis

A stakeholder is anyone whose actions can affect an organization or who is affected by the organization's actions. Because of these mutual interactions, each stakeholder has a stake in what the organization does, and vice versa. Stakeholders are also the organization's claimants; that is, they depend on the organization for the realization of some of their goals. The organization, in turn, depends on stakeholders for the full realization of its mission. Because of this mutual dependency, each stakeholder is, in effect, an advocate for any strategy that furthers its goals. For this reason, stakeholder analysis can be used to determine which one of a number of strategies will meet with the most support or least resistance during implementation.

Take, for example, a pharmaceutical company in Switzerland that is considering a number of viable strategies. As the company's executives ponder which strategy to adopt, they realize that any choice will have substantial effects on the company's advertising, legal, marketing, sales, and distribution units. It soon becomes evident that in order to select a strategy, an understanding of the company's stakeholders and other aspects of the environment in which the company operates is crucial. By thoroughly understanding stakeholder reactions to a given strategy, management can determine the viability of future implementation plans based on the strategy.

Increasingly, diverse groups are making claims as stakeholders in organizations. Federal, state, and local governments are stakeholders by virtue of regulation and taxation. Employees, through unions and employee groups, are gaining rights and powers as stakeholders. Consumer advocates, community action groups, public interest groups, creditors, suppliers, and competitors all demand a voice in organizational decision-making. Yet many of today's executives still choose strategies without fully considering the forces stakeholders might bring to bear. Such decisions almost always lead to mistakes and unrest. Frequently, they create new pressures and strife with which the executive must deal in the future. Stakeholder analysis is designed to help managers select strategies that avoid these pitfalls.

A stakeholder analysis is based on two concepts. The first is that the current state of an organization is the result of the supporting and the resisting forces brought to bear on the organization by stakeholders. Thus the present status of the organization is, at best, a temporary balance of opposing forces. Some of these forces provide resources and support to the organization; others serve as barriers or constraints. Stakeholders in the course of pursuing their own interests, goals, and objectives generate the forces.

The second premise is that the outcome of an organization's strategy is the collective result of all the forces brought to bear on it by its stakeholders during implementation of that strategy. The organization is always in a state of quasi-equilibrium as it attempts to balance the various stakeholder forces. Every time an organization acts and its stakeholders respond, a new temporary balance is achieved. The status and performance of an organization at a given point in the future depends on the equilibrium it achieves throughout the implementation period.

These two concepts lead to an important conclusion: The validity of a strategic plan always depends on the assumptions that are made about the organization's stakeholders and about the actions they will take during the planning and implementation period. Therefore, strategic managers should perform a stakeholder analysis in order to:

- Identify stakeholders.
- Map significant relationships among the stakeholders.
- Examine the stakeholder map for opportunities and threats.
- Identify, or bring to the surface, assumptions about stakeholders and the forces they exert on the organization.
- Assess the relative importance and certainty of these assumptions.
- Select a viable strategy that has a lower probability of failure due to stakeholder interference or resistance.

Following the stakeholder analysis, strategic managers undertake activities that provide more information about stakeholder assumptions, guard against or neutralize threatening stakeholder forces, and facilitate and build on the supporting and driving stakeholder forces.

Identifying Stakeholders

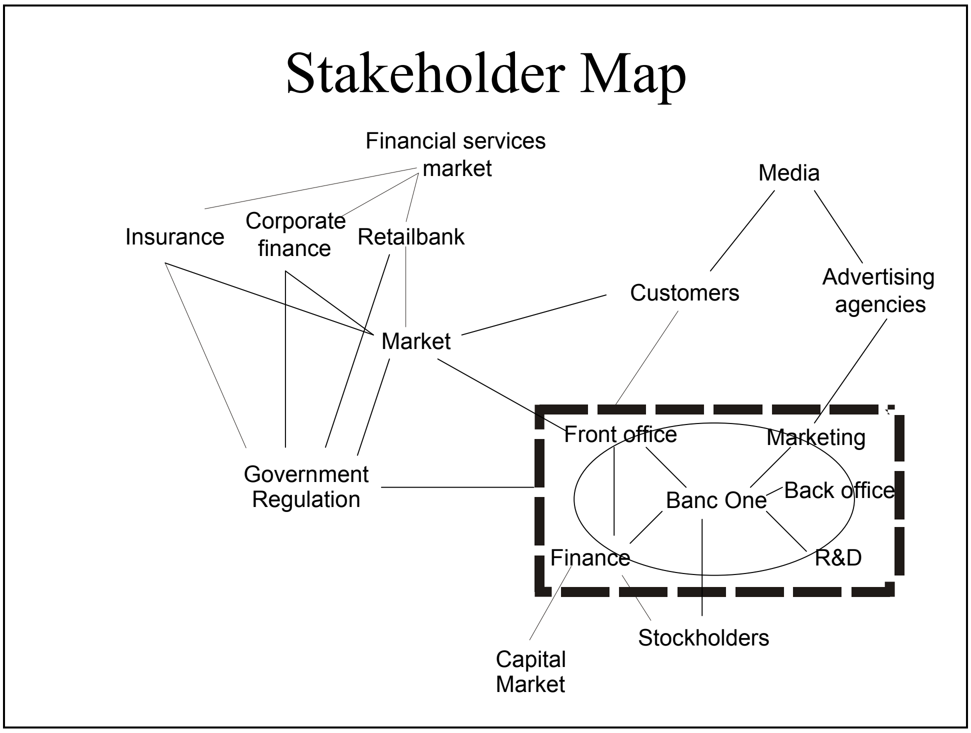
A stakeholder analysis begins with identification of as many relevant stakeholders as possible. The following checklist is a useful beginning. It should, however, be expanded, refined, and "customized" for the organization under study.

- Owners and stockholders
- Customers and clients
- Military personnel
- Labour communities
- State government
- Scientific labs
- Competitors
- Sources of new technology
- Persons in the media
- Persons in the arts
- Creditors
- Employees
- Labour unions
- Local government
- Federal government
- Suppliers
- Corporate management
- Public interest groups
- Persons in education
- Religious groups

The major stakeholders of most business enterprises can be listed under one of the following categories: Customers, Suppliers, Competitors, Owners, Regulators, Employees, or Important interest groups.

Preparing a Stakeholder Map

Having generated a list of stakeholders, strategic managers next prepare a stakeholder map by positioning the key stakeholders in a system, or network, that indicates primary relationships. The principle is the same as that used by ecologists to depict food chains a natural environment. At first the map may look like a tangle of spaghetti, but upon examination, patterns of interdependence usually emerge. These patterns are portrayed on the revised map. The following is a stakeholder map created for Banc One Inc.



Examining Stakeholder Maps for Opportunities and Threats

External stakeholders appear outside the box, internal stakeholders within it. Banc One's main competitors are depicted at the upper left along with any threatening substitute products. Their supply network is depicted on the lower left. Any changes in government policy can have a significant impact on their competitors and themselves. Other external forces being brought to bear include stockholders and the capital markets. Any new strategy must deal effectively with all of these relationships in order to be successful.

Aside from providing a "snapshot" of a company's current stakeholders, it can be used to identify trends based on past economic events and actions that were taken by various stakeholders. These maps are useful for tracking events as well as predicting the impact on future strategy.

Lessons from the Use of Stakeholder Maps

The central lesson to be learned from analysis of stakeholder maps is that actions taken by one stakeholder or group of stakeholders affect other stakeholders in the system. On the map, the affected stakeholders may be quite far removed from those who initiated the actions. The effects are propagated by means of economic, social, and political transactions among intervening stakeholders in the network. The technical term for significant changes in a stakeholder map is structural change.

Stakeholder maps for most organizations become more complex over time. As an organization grows, a variety of new stakeholders are added to the map. Some of the new stakeholders may be far removed geographically and culturally. The web of stakeholder relationships becomes more intricate, and the volume and diversity of transactions among stakeholders increase as time passes. The move toward increased complexity creates a need on the part of all stakeholders for (1) new responses that satisfy unmet needs, (2) faster responses, (3) more reliable responses, and (4) better ways of predicting the effects of chosen responses. These needs generate opportunities and threats for all the stakeholders involved in the system. Often, developing an effective response requires government action or cooperation.

Complexity also causes relationships among stakeholders to become more impersonal. Complexity, lack of personal relationships, and distance are among the reasons why stakeholder maps have become such valuable tools for strategic managers who are analysing an organization's environment.

Strategic planners also use stakeholder maps to assess the effects of real or possible changes, such as:

- New product technologies & new process technologies
- Innovations in institutional relationships
- Changed demographics, changes in the world economy
- Deregulation or increased regulation by governments
- Natural disasters, catastrophic accidents, & political crises

Managers can assess each change by tracing its probable effects on the flow of materials, goods, services, money, information, and energy throughout the stakeholder map. In addition, planners consider where costs will accumulate, resources will be consumed, and revenues and benefits will be generated. Revenues and benefits are estimated for each stakeholder on the map to determine which part of the system is most likely to benefit from the change or to determine which part of the system is a beneficial niche.

Identifying and Testing Assumptions about Stakeholders

The success of any strategy depends on the validity of assumptions being made about the organization's internal and external stakeholders, particularly about how they are likely to respond as the strategy unfolds. Because the outcome of a strategy is the cumulative effect of actions taken by stakeholders during its implementation, strategic planners must identify and validate all of the assumptions being made about each stakeholder in the system. This process, called assumption surfacing and testing, involves:

1. Assumption surfacing, or identification of assumptions;
2. Ranking of assumptions with respect to their importance and certainty; and
3. Assumption force-field analysis or determination of the net effects of assumptions that support a strategy and assumptions that do not support it.

These three steps require information gained from all of the analytic methods described earlier, especially stakeholder identification and mapping.

Assumption Surfacing: Assumption surfacing is done to identify assumptions about how stakeholders will respond to a given strategy or to identify general assumptions about stakeholders. If the strategy has already been proposed, and the purpose of the analysis is to test the overall soundness of the strategy, then assumptions are surfaced by asking, "What are the most plausible assumptions the organization must make about each stakeholder for the strategy to be successful". If no strategy has been proposed, and the purpose of the analysis is to uncover the most plausible set of assumptions upon which to base the new strategy, then assumptions are surfaced by asking, "What plausible assumptions can be made about each stakeholder?"

In either case, stakeholder assumptions can be classified into two categories:

1. **Supporting or driving-force assumptions:** those that indicate strategic opportunities and favourable conditions and are in keeping with organizational strengths.

2. **Resisting or constraining-force assumptions:** those that indicate threats, give rise to adverse and dangerous conditions, and take advantage of organizational weakness.

Assumption Rating: Assumptions about stakeholders vary with respect to the importance of these assumptions and the certainty with which they are held. Each assumption is rated on a scale of 0 through 9. For importance, the extreme values are as follows:

9 = very important assumption; one that has a most significant impact on the strategy and its outcome

0 = unimportant assumption; one that has very little impact on the strategy

For certainty, the extreme values are as follows:

9 = very certain assumption; one that is most likely to be true because either it is self-evident or there is substantial evidence to support its validity.

0 = very uncertain assumption; one that has little or no supporting evidence, is questionable, and is likely to be invalid.

These values are then graphed with the importance scale shown along the horizontal axis of the assumption-rating graph and the certainty scale shown on the vertical axis. An assumption-rating graph for Banc One is shown below.

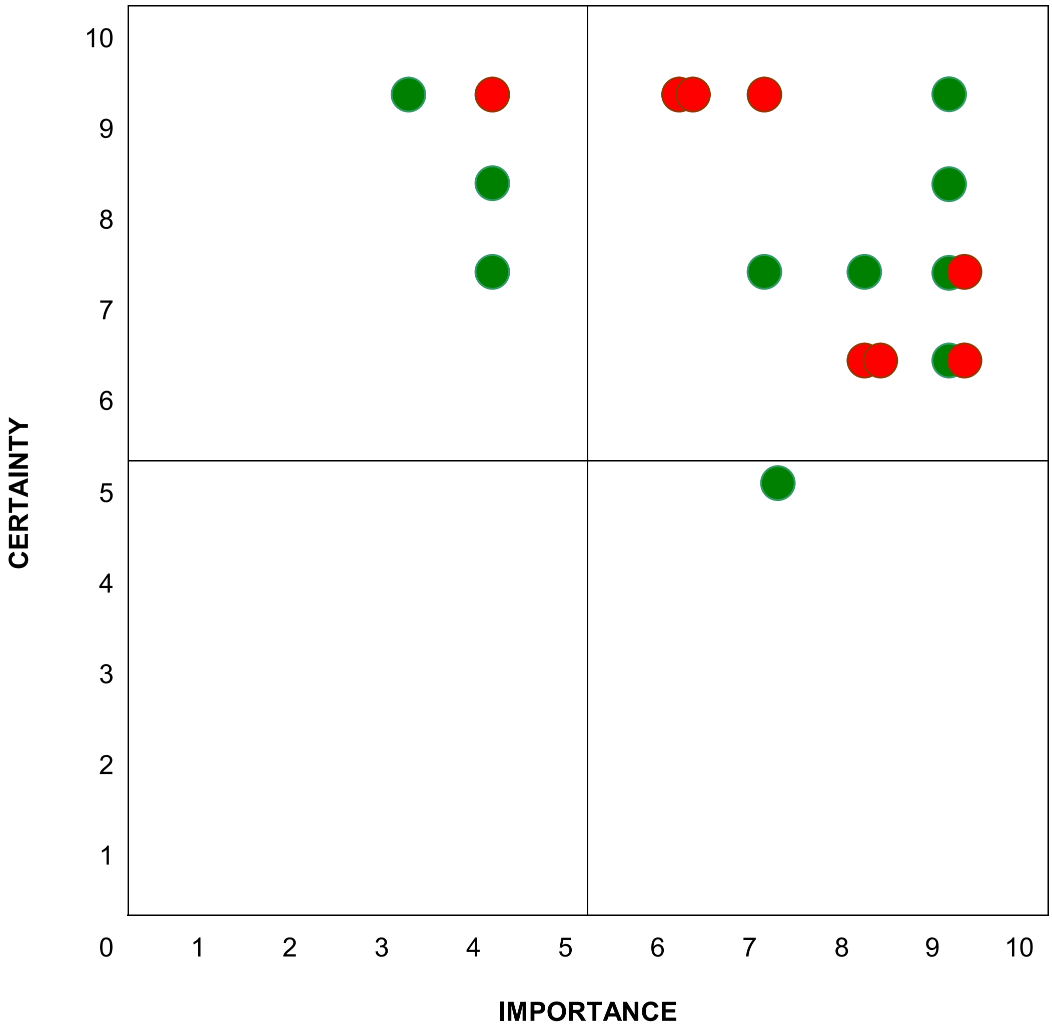
The following worksheets are based on Banc One engaging in a Horizontal Integration or Concentric Diversification Strategy.

Concentric Diversification Strategy

Stakeholder Category	Stakeholder	Major Assumptions	Assumption Rating	
			Importance	**Certainty**
	Back office	Supporting:	9	7
		1. Increased utilization		
		Resisting:	6	9
		1. Increased labor required. 2. New staffing issues. 3. New capabilities required		
	Marketing	Supporting:	7	5
		1. Can use Banc One image to promote new products. 2. More products to offer. 3. Addresses growing market.		
		Resisting:	6	9
		1 New skills required		
Internal	R&D	Supporting:	9	8
		1. Stays with current R&D focus.		
		Resisting:	4	9
		1. Additional resources must be integrated		
	Finance	Resisting:	8	6
		1. Cost of new products may initially outweigh potential 2. Increased accounting and information flows required.		
	Front office	Supporting	4	8
		1. New products are an attractive new challenge		
		Resisting:	9	7
		1. Resistance towards changed tasks		

Stakeholder Category	Stakeholder	Major Assumptions	Assumption Rating Importance	Assumption Rating Certainty
Market	Financial Services Market	Supporting: 1. Addresses growing market. 2. More products to offer.	7	7
		Resisting: 1. May kill some existing products before maturity	8	6
	Retail bank	Supporting: 1. customers able to concentrate their business 2. Services are more accessible	9	6
	Corporate Finance	Supporting: 1. Addresses growing market 2. Services more accessible	8	7
	Insurance	Supporting: 1. Services are more accessible	9	9
	Capital Market	Supporting: 1. More diverse lender	4	7
		Resisting: 1. credit analysis more difficult	9	6
	Stockholders	Supporting: 1. Potential earnings growth	3	9
		Resisting: 2. Increased risk	7	9

Concentric Diversification Strategy

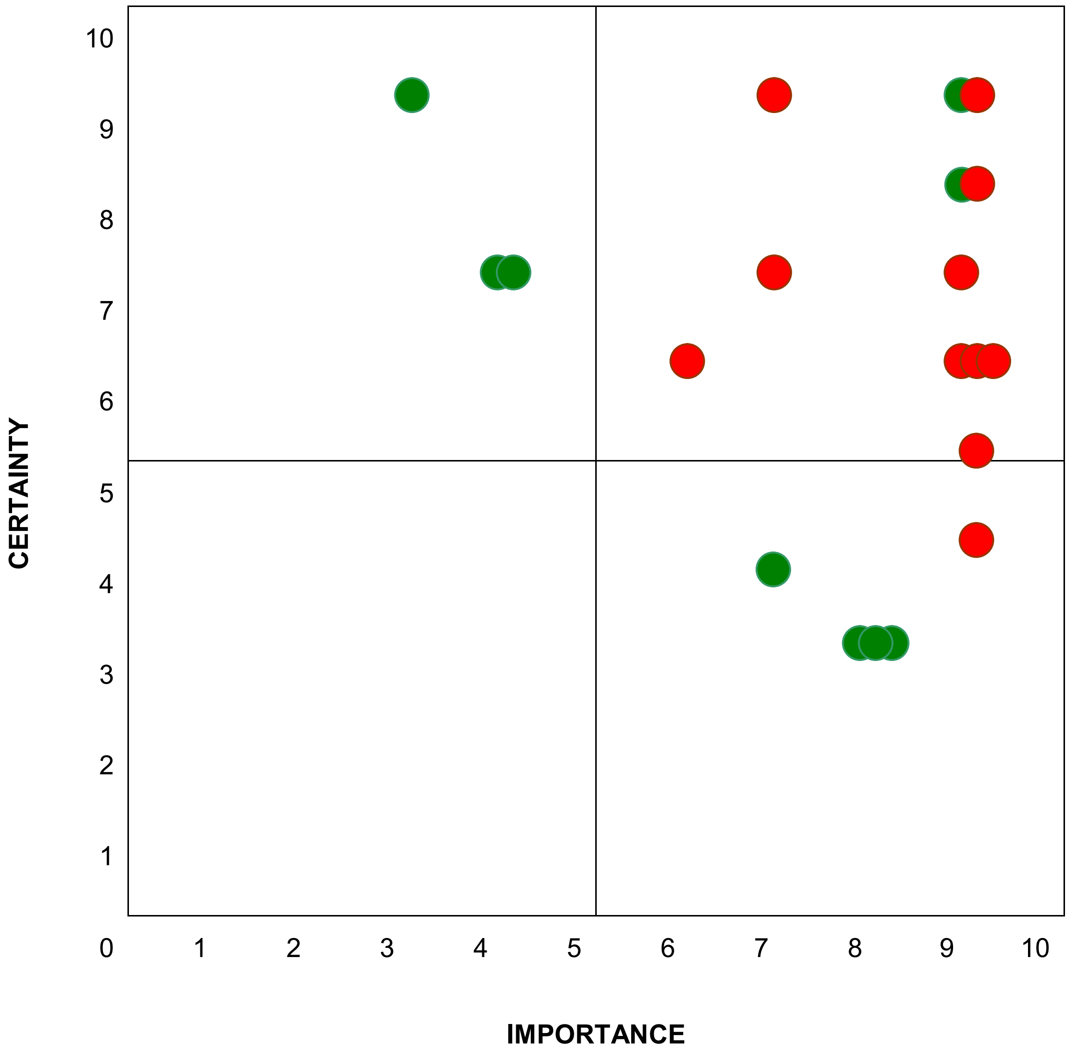


Horizontal Integration Strategy

Stakeholder Category	Stakeholder	Major Assumptions	Assumption Rating: Importance	Assumption Rating: Certainty
Internal	Back office	Supporting: 1. Increased utilization Resisting: 3. Increased labour required. 4. New staffing issues. 3. Capacity problems.	9 7	8 7
	Marketing	Supporting: 1. Can use Banc One image to promote new products. 2. More products to offer. 3. Addresses growing market. Resisting: 1. Cultural differences between merging partners	7 9	4 6
	R&D	Supporting: 1. Could mean new tech. development. 2. Core capabilities and competencies already exist. 3. Stays with current R&D focus. Resisting: 1. Additional resources must be integrated.	9 9	9 4
	Finance	Resisting: 1. Cost of integration may out weigh potential savings. 2. Increased accounting and information flows required.	9	5
	Front office	Resisting: 1. New staffing issues. 2. Overcapacity problems.	9	9
Market	Financial Services Market	Supporting: 1. Use expanding market. 2. Capitalize on brand image. Resisting: 1. May kill some existing infrastructures	4 9	7 6
	Retail bank	Supporting: 1. Use expanding market. 2. Capitalize on brand image. 3. Support current products. Resisting: 1. Consumer behaviour shifts	3 7	9 9
	Corporate Finance	Supporting: 1. Steal market share. 2. Price advantage. 3. Strong economy Resisting: 1. May kill some existing infrastructures	8 9	3 6
	Insurance	Supporting: 1. Steal market share. 2. Price advantage. 3. Strong economy Resisting: 1. Consumer behavior shifts.	8 9	3 8

Stakeholder Category	Stakeholder	Major Assumptions	Assumption Rating	
			Importance	Certainty
	Capital Market	Supporting: 1. More diversified lender.	4	7
		Resisting: 1. Credit analysis more difficult	9	7
	Stockholders	Supporting: 1. Potential earnings growth	8	3
		Resisting: 1. Increased risk because of diversification	6	6

Horizontal Integration Strategy



No manager is capable of dealing simultaneously with all the assumptions that underlie an organization's proposed strategy. The assumption-rating graph helps by identifying the most critical assumptions. It also indicates how much is known about each assumption. Armed with this information, the manager can focus on those few assumptions that comprise supporting or limiting factors for the strategy. Certainty is a guide to the amount of knowledge the manager currently has about an assumption. Important but uncertain assumptions need to be investigated further. Importance is a guide to the amount of driving or resisting force an assumption exerts on the strategy.

From the assumption rating graph one can determine whether the stakeholders are supportive or will resist a proposed strategy. Stakeholders who are supportive and important will generally accept the proposed strategy, as shown in the upper right quadrant of the graph. Stakeholders in this quadrant who are expected to resist the strategy need to be convinced to change so that they are either neutral or accepting. The lower right quadrant covers both supporting and resisting stakeholders, because the level of their acceptance is uncertain. Their importance to the successful implementation of the strategy requires that management educate them to the benefits of accepting the strategy. The lower left quadrant covers those stakeholders whose acceptance is uncertain but who have a minimal impact on the outcome of the proposed strategy. Management can ignore this group. Stakeholders in the upper left quadrant who are supportive can be ignored because their impact is unimportant. Stakeholders in this quadrant who are certain to resist the strategy need to be influenced by management in order to avoid possible interference with the strategy. Thus, we can see that the two right quadrants include the stakeholders who require the most attention. In some cases, the lower right quadrant is most important; in others, where there is strong opposition in the upper right quadrant, management must take remedial action to prevent interference with implementing the proposed strategy or select another strategy that has a lower probability of interference.

Assessment of Cultural Fit

Corporate culture is the result of many factors. Among the most obvious are the type of business the organization is in, its products, its customers, its size and location, its competitive position, its financial and human resources, its formal structure, its methods of operating, and its facilities. Even more important, however, are the intangible factors: assumptions, beliefs, values, and the unwritten, often unspoken, and frequently unconscious norms and rules of the game that are *really* operating in the firm. Norms often reflect the values of the CEO or the founder of the firm.

Strategic managers ignore corporate culture at their peril because, to be implemented successfully, strategy must be consistent with the culture and vice versa. New strategies almost always require changes in corporate culture. Strategic failures are often attributed to the inability of a firm to change its culture in ways that would make the new strategy work. There is often a gap between the existing culture and the appropriate culture for strategic success. Because culture consists largely of personal and social relationships and work tasks, such gaps are often defined as involving too much or too little of the following:

- Innovation in tasks and in task definition;
- Support for task performance;
- Attention to social and interpersonal relationships; and/or
- Personal freedom given to individuals.

Studies show that the well-run businesses of the world have distinctive cultures that promote the creation, implementation, and maintenance of successful strategies. Because an organization's culture is crucial to the success of its strategy, part of strategic planning is to assess the culture and determine whether it would promote or defeat a proposed strategy. If it would defeat the strategy, can the culture be changed? Often it is the organizational culture that prevents the strategic change from taking place. Generally speaking, strategy cannot be executed without first considering corporate culture, because people often cling to well-established beliefs about what they are willing to do, even when logical analysis should convince them otherwise.

When a change agent introduces a new strategy, it is critical that the culture be ready to lend support. The fact that the corporate culture at the top level is supportive does not necessarily mean that the entire organization is ready to pursue the same goals. Members of the organization who must implement the change are often insulated from the dynamics of the corporate culture at the top. Thus the corporate culture may be very different at different levels. The prevailing viewpoint at some levels may even be antithetical to that of top management. For example, union workers on the production lines may believe management is out to exploit them.

A strategic change that is incompatible with corporate culture often flounders in a morass of opposition, sabotage, neglect, and inaction. Even if a takeover company promises that no one will be fired, those in the acquired company who do not fit in with the new corporate culture will soon take flight or else try to sabotage the change.

In evaluating or planning for a strategic change such as a merger, it is important to consider both how the corporate culture will affect the proposed change and how the change will affect the culture. Corporate culture provides clues to appropriate change strategies. There are many examples of cases in which the culture's norms, values, beliefs, and assumptions determined what actions were taken and how they were carried out. By studying the elements of the corporate culture and their potential effect on proposed strategies, a change agent can greatly increase the likelihood of successfully implementing a strategic change.

The various combinations of organizational values and orientations produce four types of cultural environments within which organizations function. *Organizational values* range from performance in a controlled system to achievement in an open system. The *organization's orientation* can be technical, and hence differentiated, or social, with high levels of integration and coordination.

An organization's values and orientation combine to bring about a particular cultural environment. For example, valuing the achievement of individuals leads to the development of a quality culture if there is a strong technical orientation or to a creative culture if there is a more social focus. When organizational values and norms stress performance, a technical orientation leads to a productive culture, whereas a focus on interpersonal competency brings about a supportive or cooperative culture.

These four cultures have different characteristics. The productive culture concentrates on efficiency and consistency, whereas the quality culture focuses on the growth of employees within the organization through effective planning and problem solving. In practice, the productivity-oriented organization tends to employ many rigid procedures and rules, whereas the quality-oriented organization is more flexible in its approaches. The creative culture tends to be innovative and entrepreneurial, inclined toward risk taking. Change is most easily made in this type of culture. Most organizations would like—or think they would like—to have a creative culture. They may even go about trying to make change as though they did have one. But more often than not, they have some other type of culture, and the change fails. The supportive culture produces an environment characterized by teamwork, cooperation, and reinforcement. The following Organizational Culture Model shows a graphical depiction of these relationships.

Organizational Values / Norms

	Technical (differentiation)	Social (integration)
Achievement Based (open system)	**Quality Culture** Effective Planning Problem Solving **Accepts Change**	**Creative Culture** Innovation Entrepreneurship Risk Taking **Initiates Change**
Performance Based (controlled system)	**Productive Culture** Efficiency Consistency Policies/Procedure Rituals **Resists Change**	**Supportive Culture** Teamwork Cooperation Growth **Responds to Change**

Organization's Orientation

Cultural Fit Analysis

The following Analysis of Cultural Fit shows an example of cultural elements that are likely to affect the success of a strategic change. The scores reflect the culture of Banc One. The first column of numbers is used to rate the culture in each of these categories. The importance of the various cultural elements depends on their pervasiveness, strength, and relation of a specific element to acceptance of change. The second column is used to evaluate the compatibility of the proposed strategy with each of the elements as they exist in the present culture. A high score means that the strategy is likely to go in a direction that is consistent with that of the existing culture.

Horizontal Integration Strategy

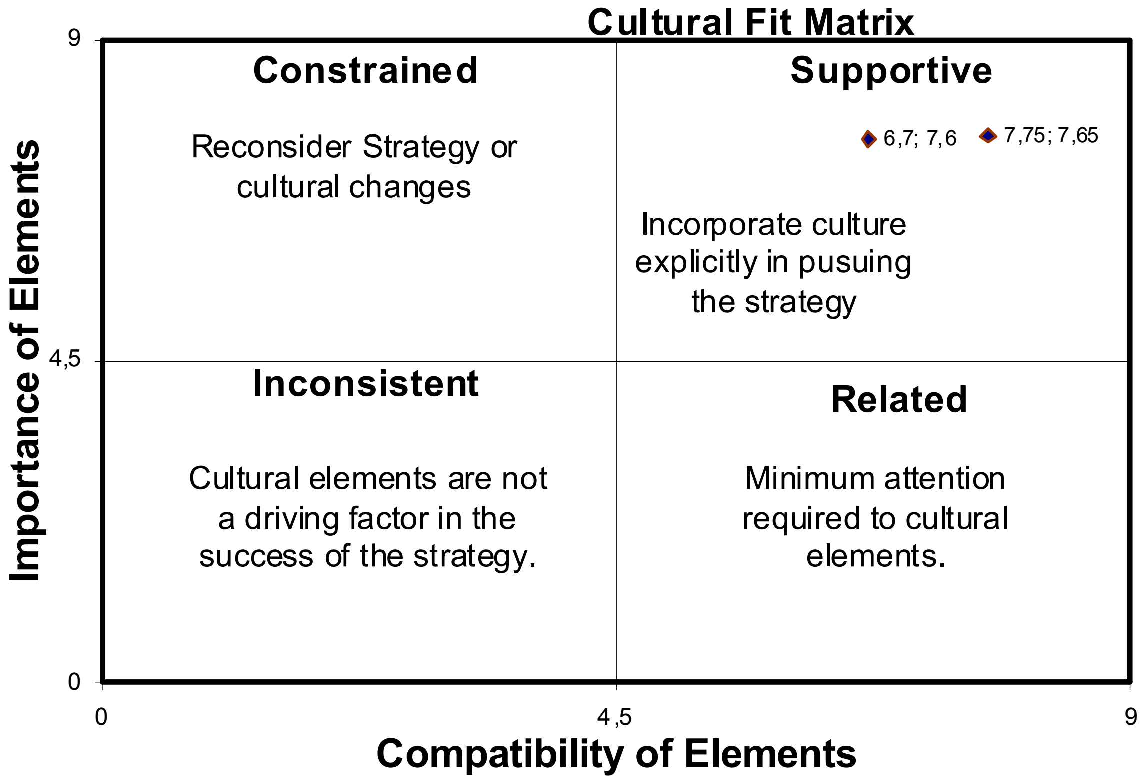
	Elements	Importance in Culture	Compatibility With Strategy
1.	Board's policy	9	9
2.	Key executive's style	8	8
3.	Maturity of organization	8	7
4.	Cohesiveness and collaboration	7	8
5.	Openness and trust	7	7
6.	Climate of organization	8	6
7.	Recognition of individual	8	8
8.	Rewards for performance	7	7
9.	Support for individual	8	7
10	Participation in decisions	7	7
11	Consistent communication	8	7
12	Enforcement of policies	7	7
13	Degree of social interaction	7	6
14	Opportunity for growth	7	8
15	Level of job security	8	5
16	Level of technology	7	5
17	Degree of innovation	8	5

18	Sense of belonging	8	4
19	Latitude in job execution	7	8
20	Sense of urgency	8	5
	Average	7,6	6,7

Concentric diversification

	Elements	**Importance in Culture**	**Compatibility With Strategy**
1.	Board's policy	9	9
2.	Key executive's style	8	8
3.	Maturity of organization	8	8
4.	Cohesiveness and collaboration	7	9
5.	Openness and trust	7	7
6.	Climate of organization	8	7
7.	Recognition of individual	8	8
8.	Rewards for performance	7	7
9.	Support for individual	8	7
10	Participation in decisions	7	7
11	Consistent communication	8	7
12	Enforcement of policies	7	7
13	Degree of social interaction	7	6
14	Opportunity for growth	9	9
15	Level of job security	8	8
16	Level of technology	7	9
17	Degree of innovation	8	8
18	Sense of belonging	7	8
19	Latitude in job execution	7	8
20	Sense of urgency	8	8
	Average	7,65	7,75

The four ways in which culture and strategic change can be related are shown in the following matrix. If the average scores in the two columns in the Assessment of Cultural Fit are high, the fit is supportive: elements that are important in the culture are strongly compatible with the strategic change. A low average score in the first column and a high average score in the second indicate that the culture is related to the strategy, so little attention to cultural elements is required. Low average scores in both columns suggest that the change is inconsistent with the culture and that factors other than culture should be considered. A high average score in the first column and a low average score in the second signify a seriously constrained relationship between the culture and the strategy. The stronger the elements in the culture and the more incompatible the proposed strategy, the more difficult it is for the strategy to succeed. Thus the assessment provides a way of focusing on the elements of culture in determining which proposed strategy best fits with the current culture.



Quantitative Strategic Planning Matrix (QSPM)

A third tool that can be used to determine the relative attractiveness of feasible alternative actions is the *Quantitative Strategic Planning Matrix (QSPM).* This technique objectively indicates which alternative strategies are best based on their ability to capitalize on the key success factors outlined in the IFE and EFE. Like other strategy-formulation analytical tools, the QSPM requires good intuitive judgment.

Conceptually, the QSPM determines the relative attractiveness of various strategies based on the extent to which key external and internal critical success factors are capitalized upon or improved. The relative attractiveness of each strategy within a set of alternatives is computed by determining the cumulative impact of each external and internal critical success factor. Any number of alternative strategies can be included in the QSPM.

The steps involved in constructing a QSPM are as follows:

1. List the firm's key external opportunities/threats and internal strengths/weaknesses in the left column of the QSPM. This information should be taken directly from the EFE Matrix and IFE Matrix.

2. Assign weights to each external and internal critical success factor. These weights are identical to those in the EFE Matrix and the IFE Matrix. The weights are presented in a straight column just to the right of the external and internal critical success factors.

3. Examine the Strategic Alternatives Matrix and identify alternative strategies that the organization should consider implementing. Record these strategies in the top row of the QSPM.

4. Determine the Attractiveness Scores (AS), defined as numerical values that indicate the relative attractiveness of each strategy. *Attractiveness Scores* are determined by examining each external and internal factor and asking the question "How well does this strategy address this factor?" Attractiveness Scores are as follows; 1 = *strategy does not address the factor,* 2 = *strategy addresses the factor to a low degree,* 3 = *addresses the factor to a moderate degree,* and 4 = *addresses the factor to a very high degree.*

5. Compute the Total Attractiveness Scores. *Total Attractiveness Scores* are defined as the product of multiplying the weights by the Attractiveness Scores in each row. The Total Attractiveness Scores indicate the relative attractiveness of each alternative strategy, considering only the impact of the adjacent external or internal factor. The higher the Total Attractiveness Score, the more attractive the strategic alternative is based on that factor.

6. Compute the Sum Total Attractiveness Score. Add Total Attractiveness Scores in each strategy column of the QSPM. The *Sum Total Attractiveness Scores* reveal which strategy is most attractive in based on the key internal and external factors. Higher scores indicate more attractive strategies, considering all the relevant external and internal factors that could affect the strategic decision. The magnitude of the difference between the Sum Total Attractiveness Scores indicates the relative desirability of one strategy over another.

A QSPM for a food company is provided below. This example illustrates all the components of the QSPM: Key Factors, Strategic Alternatives, Weights, Attractiveness Scores, Total Attractiveness Scores, and the Sum Total Attractiveness Score. As can be seen from the Sum total attractiveness score the joint venture in Europe is the most desirable strategy according to this model.

Quantitative Strategic Planning Matrix

		Strategic Alternatives			
		Joint Venture in Europe		Joint Venture in Asia	
Critical Success Factors	Weight	AS	TAS	AS	TAS
Opportunities					
1. One European currency—Euro	.10	4	.40	2	.20
2. Rising health consciousness in selecting foods	.15	4	.60	3	.45
3. Free market economies arising in Asia	.10	2	.20	4	.40
4. Demand for soups increasing 10% annually	.15	3	.45	4	.60
5. North American Free Trade Agreement	.05	1	.05	1	.05
Threats					
1. Food revenues increasing only 1 percent annually	.10	3	.30	4	.40
2. ConAgra's Banquet TV Dinners lead market with 27.4 percent share	.05	1	.05	1	.05
3. Unstable economies in Asia	.10	4	.40	1	.10
4. Tin cans are not biodegradable	.05	1	.15	1	.15
5. Low value of the dollar	.15	4	.60	2	.30
Strengths					
1. Profits rose 30 percent	.10	4	.40	2	.20
2. New North American division	.10	1	.10	1	.10
3. New health-conscious soups are successful	.10	4	.40	3	.20
4. Swanson TV dinners' market share has increased to 25.1 percent	.05	4	.20	3	.15
5. One-fifth of all managers' bonuses are based on overall corporate performance	.05	1	.05	1	.05
6. Capacity utilization increased from 60 to 80%	.15	3	.45	4	.60
Weaknesses					
1. Pepperidge Farm sales have declined 7 percent	.05	1	.05	1	.05
2. Restructuring cost $302 million	.05	1	.05	1	.05
3. The European operation is losing money	.15	2	.30	4	.60
4. The company is slow in globalizing	.15	4	.60	3	.45
5. Pre-tax profit margin of 8.4 percent is only one-half industry average	.05	1	.05	1	.05
Sum Total Attractiveness Score			5.85		3.5

Conclusion

The main appeal of any managerial approach is the expectation that it will enhance organizational performance. This is especially true of strategic management. Through involvement in strategic-management activities, managers and employees achieve a better understanding of an organization's priorities and operations. Strategic management allows organizations to be efficient, but more importantly, it allows them to be effective. Although strategic management does not guarantee organizational success, the process allows proactive rather than reactive decision-making. Strategic management may represent a radical change in philosophy for some organizations, so strategists must be trained to anticipate and constructively respond to questions and issues as they arise. The concepts and models discussed in this guide can represent a new beginning for many firms, especially if managers and employees in the organization understand and support the plan for action.

Due to increasing turbulence in markets and industries around the world, the external audit has become an explicit and vital part of the strategic-management process. This guide has provided a framework for collecting and evaluating economic, social, cultural, demographic, environmental, political, governmental, legal, technological, and competitive information. Firms that do not mobilize and empower their managers and employees to identify, monitor, forecast, and evaluate key external forces may fail to anticipate emerging opportunities and threats and, consequently, may pursue ineffective strategies, miss opportunities, and invite organizational demise. Firms not taking advantage of the Internet are falling behind technologically.

A major responsibility of strategists is to ensure the development of an effective external-audit system. This includes using information technology to devise a competitive intelligence system that works. The external-audit approach described in this guide can be used effectively by any size or type of organization. Typically, the external-audit process is more informal in small firms, but the need to understand key trends and events is no less important for these firms. Multinational firms especially need a systematic and effective external-audit system because external forces among foreign countries vary greatly.

Management, marketing, finance/accounting, production/operations, research and development, and computer information systems represent the core operations of most businesses. A strategic-management audit of a firm's internal operations is vital to organizational health. Many companies still prefer to be judged solely on their bottom-line performance. However, an increasing number of successful organizations are using the internal audit to gain competitive advantages over rival firms.

Systematic methodologies for performing strength-weakness assessments are not well developed in the strategic-management literature, but it is clear that strategists must identify and evaluate internal strengths and weaknesses in order to formulate and choose among alternative strategies effectively. The EFE Matrix, Competitive Profile Matrix, IFE Matrix, Company Capability Profile, and financial ratio analysis provide the basic information needed to formulate competitive strategies successfully. The process of performing an internal audit represents an opportunity for managers and employees throughout the organization to participate in determining the future of the firm. Involvement in the process can energize and mobilize managers and employees.

The essence of strategy formulation is an assessment of whether an organization is doing the right things and how it can be more effective in what it does. Every organization should be wary of becoming a prisoner of its own strategy, because even the best strategies become obsolete sooner or later. Regular reappraisal of strategy helps management avoid complacency. Objectives and strategies should be consciously developed and coordinated and should not merely evolve out of day-to-day operating decisions.

An organization with no sense of direction and no coherent strategy precipitates its own demise. When an organization does not know where it wants to go, it usually ends up some place it does not want to be. Every organization needs to consciously establish and communicate clear objectives and strategies.

Tools such as the ones discussed in this guide can enhance significantly the quality of strategic decisions, but they should never be considered perfect. Behavioural, cultural, and political aspects of strategy generation and selection are always important to consider and manage. Due to increased legal pressure from outside groups, boards of directors are assuming a more active role in strategy analysis and choice. This is a positive trend for organizations and will hopefully drive further refinement and commitment in the area of corporate governance and positive corporate citizenship.