CHAPTER 5

STRATEGY FORMULATION AND IMPLEMENTATION METHODS TO ACHIEVE COMPETITIVE ADVANTAGE

5.1 The Objectives for Growth

The growth of corporations in an important issue for a number of reasons :

1. *To meet the objectives of the owners / shareholders*

The objectives of the owners / shareholders are the driving forces behind the company and given the entrepreneurial nature of the management, their desire for success is likely to be met through profitable growth.

2. *To keep one step ahead of competition*

Companies operate within a rapidly changing environment, and therefore cannot be complacent and have to consciously plan for growth through the enforcement of rules and systems. The disciplines which planned growth will bring to a company will ensure that the company is aware of what is happening in the marketplace and, as a result, that it keeps ahead of competitors.

3. *To keep organisation dynamic*

An organisation has to be dynamic, i.e. possessing energy and forcefulness to survive and develop, otherwise, it will become sluggish and commercially stagnant and will be left behind.

4. *To motivate key personnel*

One of the key resources of a company is its personnel. If a company wishes to employ good quality staff, then it must grow or it will find it almost impossible to recruit ambitious staff and difficult to retain existing staff.

5. *To ensure survival*

Companies have to grow to survive and there is no doubt that those which stand still are likely to be at a disadvantaged in today's competitive business environment. The struggle for companies to survive suggests that those which do not wish to grow are prone to increased competition with competitors attempting to secure increased market share.

6. *To maintain potential*

Growth gives a company an opportunity to maximise its potential and, thus, the returns which it makes to the owners / shareholders.

To prepare for growth, top management must be aware of the need for growth and have an overall strategy for achieving its growth objectives. The winning tactics are the specific tasks needed to achieve the company's objectives.

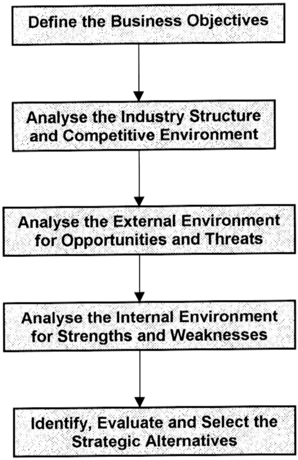
5.2 Concept of Strategic Management

In deriving the organisations' future direction, management must answer three basic questions :

1. Where is the business now ?
2. Where does the management want the business to be (*i.e. what are its objectives*) ?
3. How does the business move from where it is now to where management wants it to be (*i.e. what strategy is to be used*) ?

Strategic management therefore involves making decisions that define the organisation's mission and objectives, determining the organisation's most effective utilisation of its resources, and seek to assure the effectiveness of the organisation within its environment. Moreover, strategic planning should be dynamic rather than static. Subsequently, strategy development should look outside the business; to changes, trends, threats and opportunities, and to create strategies that are responsive.

Figure 5.1 Framework for Strategy Formulation



5.3 Advantages of Strategic Management

There a various advantages of strategic management which are highlighted below :

1. Provide better guidance to the entire organisation on the crucial point of what it is trying to do and achieve.
2. Making managers more alert to the winds of change, new opportunities and threatening developments.
3. Providing managers with a rationale to evaluate competing budget request for investment capital and new staff – a rationale that argues strongly for steering resources into strategy – supportive and results-producing areas.
4. Helping to unify the numerous strategy-related decisions by managers across the organisation, and
5. Creating a more proactive management posture and counteracting tendencies for decisions to be reactive and defensive, and this is often the key to better long-term performance.

5.4 Alternatives Available for Strategic Management

There are a variety of techniques available for engineering consulting firms to grow and expand their services to achieve competitive advantages and earn above-average returns. The various strategies are highlighted below and can be chosen by the firms based on their mission and capabilities. The choice of strategy would depend on the firm's size, capabilities, financial resources, goals and external environment. The strategies available are :

1. Business – Level Strategy
2. Corporate – Level Strategy
3. Merger and Acquisition Strategy
4. Joint Ventures

5.4.1 Business – Level Strategy

Business-level strategies are concerned with a firm's industry position relative to competitors. Companies that have established favourable industry positions are better able to cope with the five forces of competition. To position itself, a firm must decide if its intended actions will allow it to perform activities differently or to perform different activities from its rivals. Thus, favourable positioned firms may have a competitive advantage over their industry rivals. This is important in that the universal objective of all companies is to develop and sustain competitive advantages. The firms may choose from four generic business-level strategies to establish and exploit a competitive advantage within a particular competitive scope.

Figure 5.2 Four Generic Strategies

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

Source : Adapted from Hitt, M.A., Ireland, R.D. and Hoskisson, R.E. (1999), *Strategic Management : Competitiveness and Globalization*, Cincinnati, Ohio : South – Western College Publishing (Pg. 136)

Based on the Four Generic Strategies, engineering consulting firms should adopt the combination of **Differentiation Strategy** along with the **Focus Strategy**.

5.4.1.1 Cost Leadership Strategy

A cost leadership strategy is an integrated set of actions designed to produce services at the lowest cost, relative to competitors, with features that are acceptable to customers. This strategy should achieve low cost in relative to competitors while not ignoring means of differentiation that customers value. Firms seeking competitive advantage by implementing this strategy often sell no-frills, standardised services to the most typical clients in the industry.

However, in the new competitive environment, it is increasingly difficult for firms to implement this type of strategy because the clients are seeking unique services that would be more attractive while not ignoring the cost criteria. Moreover, this strategy would not be feasible for engineering consulting firms because of the standard scale of fees set by the Board of Engineers, Malaysia which would dictate that the firms receive only about 5% to 10% of the project cost.

5.4.1.2 Differentiation Strategy

A differentiation strategy is an integrated set of actions designed to produce services that clients perceive as being different in ways that are important to them. This strategy calls for the firms to sell non-standardised services to clients with unique needs. It should consistently upgrade a service's differentiation features that clients value without ignoring cost to clients. This cost would again be according to the 5% to 10% of the project cost. It is the ability to sell its differentiated service at a price that exceeds what was spent to create it that allows the firm to outperform its rivals and earn above-average returns.

Rather than costs, the focus of the differentiation strategy is on continuously investing in and developing features that differentiate services in ways that clients value. Overall, a firm using the differentiation strategy seeks to be differentiated from its competitors along as many dimensions as possible. The less similarity a firm's services and those of competitors, the more buffered the firm is from rival's actions.

A service can be differentiated in a number of ways; unusual features, responsive customer service, rapid service, technological leadership, perceived prestige and status, different tastes and engineering design and performance. Differentiation breeds loyalty, which ensures that the firm's and client's relationship would be lasting as long as the service is differentiated and of high quality.

Differentiation strategy is also known as vertical concentration, which denotes specialisation in a relatively narrow range of clients and engineering services. Firms that focus on the vertical approach generally try to market their work over a broad geographic area.

5.4.1.3 Focus Strategy

A focus strategy is an integrated set of actions designed to produce services that serve the needs of a particular competitive segment. Although the breath of a *target is clearly a matter of degree, the essence of the focus strategy is the* exploitation of a narrow target's differences from the balance of the industry. Through successful implementation of a focus strategy, a company can gain a competitive advantage in its chosen target segments even though it does not possess an industry-wide competitive advantage.

The foundation of focus strategies is that a firm can serve a particular segment of an industry more effectively or efficiently than can industry-wide competitors. Success with a focus strategy rests on a firm's ability either to find segments where unique needs are so specialised that broad-based competitors choose not to serve them or locate a segment being served poorly by the broad-based competitors.

The focus strategy is also known as the horizontal concentration, which is most characterised by concentration on a limited locality. Consulting engineers who use the horizontal approach attempt to serve many kinds of clients by offering services from a variety of engineering services .

Many firms that choose to concentrate and expand their business in single areas of engineering have done so because they have gained a reputation for doing a superb job on certain types of projects early in their history. Consequently, the same firms may deliberately solicit similar projects in an ever-widening geographic range. In such firms, marketing efforts are often based primarily on premise that the organisation is a well-known expert in its chosen line of engineering.

5.4.1.4 Summary

The basic markets for consulting engineers include services to the following kinds of clients : residential homeowners, commercial enterprises, industry, private and non-profit institutions, government agencies and insurance companies and forensic specialist. Potential clients in each of these markets have need for a wide range of professional engineering expertise through all phases of project selection, design, construction, operation and maintenance. Effective planning for a firm's organisational and promotional activities is grounded in an understanding of the particular markets that the business can serve while restricting overhead and maximising income.

Therefore, value can be provided by engineering consulting firms by adopting the **Focused Differentiation Strategy**, which is providing differentiated services to a particular competitive segment. The advantage of this strategy is that engineering consulting firms could utilise their core competencies and specialisation to provide competitive services to a market segment, which could vary from a small geographic area for small firms to international ventures for large firms, depending on the firms' capabilities and size.

There is no requirement that specialised expertise be some new, far-out version of professional engineering. The basic requirements are for the firm to be able to do consistently exemplary work, to market the organisation's services and to maintain a high level of quality as the firm increases the geographic area of its projects and hires additional staff.

5.4.2 Corporate – Level Strategy

5.4.2.1 Levels and Types of Diversification

When a firm chooses to diversify its operations beyond a single industry and to operate businesses in several industries, it is pursuing a corporate-level strategy of diversification. A corporate-level strategy is action taken to gain a competitive advantage through the selection and management of a mix of businesses competing in several industries or markets. It is concerned with two key questions : what business the firm should be in and how the corporate office should manage its group of businesses.

The are various levels and types of diversification, which are listed below.

Table 5.1 Levels and Types of Diversification

Low Levels of Diversification	
Single Business	More than 95% of revenue comes from a single business
Dominant Business	Between 70% to 95% of revenue comes from a single business
Moderate to High Levels of Diversification	
Related Constrained	Less than 70% of revenue comes from the dominant business, and all businesses share product, technological and distribution linkages
Related Linked	Less than 70% of revenue comes from the dominant business, and there are only limited links between business
Very High Levels of Diversification	
Unrelated	Less than 70% of revenue comes from the dominant business, and there are no common links between businesses

Source : Adapted from Hitt, M.A., Ireland, R.D. and Hoskisson, R.E. (1999), *Strategic Management : Competitiveness and Globalization*, Cincinnati, Ohio : South – Western College Publishing (Pg. 205)

5.4.2.2 Methods of Achieving Diversification

Engineering consulting firms that are interested in diversification as a growth strategy should consider the moderate to high levels of diversification. Diversification can be achieved through a variety of methods. For example, a consulting firm may choose to increase the staff by adding experts qualified to practice in fields in which the firm had not previously excelled. One or more experts in a given field may be attracted to become a partner or responsible stockholder in the firm, thus helping the firm in achieving prestige and financial success.

For small firms, the addition of a partner – or, for that matter, a merger with another firm – is chiefly an organisational change geared towards promoting growth. However, medium-sized and large engineering organisations can often add new disciplines and new partners or staff without substantially altering the structure of the organisation.

5.4.2.3 Considerations of Diversification

When a firm diversifies by adding an additional service, the firm should take considerable efforts toward marketing the added discipline, to be able to sell its diversified service. Unless the individual who is put in-charge of the new discipline has a well established reputation for doing high quality work in that service, the firm would need to build confidence between prospective clients and the consultant. This requires an extended period of public relations effort during which the client may gradually get to know the engineers involved and build sufficient rapport to provide a sound basis for solid consultant-client relations.

Another factor that needs to be considered prior to attempts to diversify is continuity. In other words, the firm would need to add disciplines, staff and clients without significantly disrupting the current operations of the practice. For some, continuity is best achieved through mergers or partnerships with other established organisations rather than by adding staff members.

Regardless of the specific route the firm chooses, the best way to evaluate the ideas for diversification is to watch the response of clients. For instance, the firm could send out news release or other forms of announcements to let the current and prospective clients know about the change in staffing or organisation to add an engineering discipline to the firm. The first set of announcements could be followed a few weeks later by advertisements, a revised company brochure or telephone calls to selected clients.

By engaging in this sort of promotional campaign, the firm would, in effect, be testing the market for the diversification efforts. Such a campaign can be accomplished at nominal expense to the consulting organisation. More importantly, it reduces the risk inherent in any change in company orientation.

5.4.2.4 Advantages of Diversification

There are many advantages of diversification. Through related diversification, the firm can build upon or extend its existing resources, capabilities and core competencies in the pursuit of strategic competitiveness. Thus, firms that have selected related diversification as their corporate-level strategy seek to exploit economies of scope between business units, which is the cost savings attributed to transferring capabilities and competencies developed in one business to a new business without significant additional costs. This could be carried out either by sharing activities or transferring core competencies.

Related diversification could also be used to gain market power. Market power exists when a firm is able to sell its services above the existing competitive level or reduce the costs of its primary and support activities below the competitive level, or both. An approach to create value by gaining market power is the strategy of vertical integration.

Vertical integration exists when a company is producing its own inputs (backward integration) or owns its own source of distribution of outputs (forward integration). It is also possible to have partial vertical integration where some inputs and outputs are sold by company units, while other inputs and outputs are produced and sold by outside companies.

An example of this is Ranhill Berhad, which has seven subsidiary companies involved in engineering, procurement and construction management services, project management services, investment holding, facilities management, maintenance services, construction and civil, structural and mechanical engineering services.

There are many other advantages and reasons for diversification. Diversification allows firms with poor performance in a certain field of engineering to invest in another field of engineering that will bring about better performance and returns. The choice of diversification would depend on the needs of the country and the company's competencies. Moreover, a firm could diversify when it is uncertain with its future cash flow and to reduce risk of only focusing in a certain area.

For example, in Malaysia, the need for infrastructure works such as roads and water supply is higher than the need for high-rise buildings. Therefore, an engineering company which core business is structural engineering could diversify into civil engineering and provide services for road and water supply engineering to take advantage of the high supply of projects. This could improve the firm's performance and future cash flow, while reducing the risk of not obtaining adequate projects.

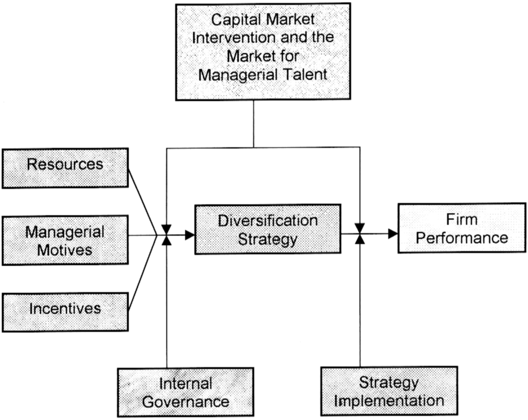
There are also many managerial motives for diversification. This could include managerial risk reduction and a desire for increased compensation. For instance, diversification may reduce top-level managers' employment risk (risk of job loss or income reduction). That is, corporate executives may diversify a firm in order to diversify their employment risks, as long as profitability does not suffer excessively.

Diversification also provides an additional benefit to managers that shareholders do not enjoy. Diversification and firm size are highly correlated and, as size increases, so does executive compensation. Large firms are more complex and harder to manage and thus, managers of larger firms are compensated more highly. As a result, diversification provides an avenue for increased compensation and therefore may serve as a motive for managers to engage in greater diversification.

Nevertheless, there are governance mechanisms, such as board of directors, ownership monitoring, executive compensation and the market for corporate control that may limit tendencies to over-diversify.

5.4.2.5 Summary

Figure 5.3 Summary Model of the Relationship between Firm Performance and Diversification



Source : Adapted from Hitt, M.A., Ireland, R.D. and Hoskisson, R.E. (1999), *Strategic Management : Competitiveness and Globalization*, Cincinnati, Ohio : South – Western College Publishing (Pg. 136)

5.4.3 Merger and Acquisition Strategy

5.4.3.1 Advantages of Mergers and Acquisitions

A merger is a transaction in which two firms agree to integrate their operations on a relative coequal basis because they have resources and capabilities that together may create a stronger competitive advantage. Alternatively, an acquisition is a transaction in which a firm buys controlling or 100 percent interest in another firm with the intent of more effectively using a core competence by making the acquired firm a subsidiary business within its portfolio. Using these methods, consulting engineers find that they can quickly add successful new offices and new business territories without much additional capital or new staff.

Becoming acquainted with other engineering firms with which the firm can develop fruitful professional relationships is indeed one of the virtues of keeping active in various voluntary professional organisations. Many successful mergers and acquisitions have begun as a result of casual, friendly discussions at meetings of professional engineering groups.

Generally, engineering consulting firms do benefit from combinations and new partnerships – provided that modifications add depth to the management, sales, and engineering expertise of the group. Greater depth in these areas will almost invariably enhance the general profile of the businesses as it is viewed by the new and old clients, particularly at top management levels. In order to make the combination of firms a successful operation, it would require a willingness on the part of all individuals involved to work towards a common goal.

Further, it requires the members to accept the individual successes, as well as the failings, of every other person in the group. So long as everyone is willing to work towards the resolution of problems that develop, the capability of continued success remains.

5.4.3.2 Disadvantages and Problems to Mergers and Acquisitions

There are may reasons and advantages of mergers and acquisitions. But despite the potential advantages, fiercely independent consultants tend to shy away from the idea of becoming involved in professional ventures that they feel may limit their autonomy. Joint ventures, new partnerships, additional offices and other efforts toward expansion and combination are occasionally viewed as threats to the hard-earned and cherished independence that attracted the engineers to professional consulting in the first place. This is the main reason why combinations of small firms do not occur more frequently.

Nevertheless, there are also many problems in achieving success in mergers and acquisitions. These are indicated in the Figure 5.4, which is self-explanatory.

5.4.3.3 Summary

Pursued with care, an expanded practice offers many advantages to the engineering consulting firms, especially to small firms. Arrangement for a larger organisation provides increased continuity in the management and engineering of the group, and greater freedom for its owners and principals. Further, the expanded practice provides a vital buffer against economic and personal losses that could be sustained. Firms that develop a strong managerial and supportive foundation through growth techniques can maintain their standing in a competitive market despite a substantial unexpected loss.

A summary of the reasons and advantages of choosing mergers and acquisitions, and the inherent problems faced in achieving success for the engineering consulting firms are listed below.

Figure 5.4 Advantages and Problems of Mergers and Acquisitions

Reasons for Mergers and Acquisitions		Problems in Achieving Success
Increased Market Power		Integration Difficulties
Overcome Entry Barriers		Inadequate Evaluation of Target
Cost of New Service Development		Large or Extraordinary Debt
Increased Speed to Market	**Mergers and Acquisitions**	Inability to Achieve Synergy
Lower Risk Compared to Developing New Services		Managers Overly Focused on Mergers and Acquisitions
Increased Diversification		Too Much Diversification
Avoid Excessive Competition		Too Large

Source : Adapted from Hitt, M.A., Ireland, R.D. and Hoskisson, R.E. (1999), *Strategic Management : Competitiveness and Globalization*, Cincinnati, Ohio : South – Western College Publishing (Pg. 247)

5.4.4 Joint Ventures

Perhaps the type of consulting firm that most thoroughly integrates the three types of business growth – business-level strategy, corporate-level strategy and mergers and acquisitions – is the joint venture.

5.4.4.1 Advantages to the Client

Most clients who have experience dealing with the various groups involved in large engineering projects – consultants, contractors, suppliers of materials, equipment and the like – are all too familiar with the potential haggling and attendant delays that may accompany such jobs. Consequently, many begin looking for engineering consultants who can provide the total job within a more cohesive framework.

This preference accounts largely for the increasing popularity of the design-build concept of consulting engineering. At this furthest extreme, the engineering firms have sought to satisfy the sophisticated customer's desire with organisations that do the total job. In international contracts particularly, a consulting firm may take the form of a multifaceted corporation providing design, construction, manufacturing, financial and management services.

Nevertheless, there are disadvantages of joint ventures too. For example, a project completed by a sole-source firm frequently carry sundry hidden handling and co-ordination costs capable of increasing the final costs by anywhere from 20% to 60% over original estimates. However, joint ventures and other strong, diverse organisations can offer unified administration of the overall effort, centralised management of personnel, more effective professional and financial responsibility, more economical results through co-ordinated design, greater contractual oversight and clearer relations between engineers and clients.

5.4.4.2 Advantages to the Consulting Firm

To the groups involved in a given joint venture, both tangible and less obvious advantages accrue. Among the most important are the following :

1. Ability of the joint venture to secure clients who could not be attracted by any of the member firms operating individually
2. Increased profit potential
3. Increased professional experience and exposure for each firm involved
4. Opportunity for staff members to increase their skills in working within, and being responsible for, a team
5. Lasting increases in sales, profit and net worth capabilities for members of the joint venture

5.4.4.3 Disadvantages of Joint Ventures

The major disadvantage to the members of a joint venture is the greater number of individuals on which the professional status and ultimate success of the larger group depend. Thus, the chance of errors may increase. While the joint venture will only be as effective as the weakest components, however, the larger group offers increased checking and verification during the course of the job. Another disadvantage is that each member of the joint venture should be willing to accept full responsibility for its partners in the agreement. This is because potential liabilities in a joint venture are not only professional but legal and financial.

5.4.4.4 Management of Joint Ventures

For an established consulting organisation, it is usually not a problem getting people with the proper engineering skills needed to make a project a success. The place where difficulties occur is in eliciting and co-ordinating such performances within the newly assembled team. Thus, the management becomes the most critical task facing a well-organised joint venture.

A number of approaches have been taken to minimise the difficulties inherent in managing joint ventures. The two most common are :

1. Creation of a separate management group
2. Appointment of one of the participating firms as the managing body.

The first option generally works best for large or long-term projects. A separate management team concentrates on the administrative requirements of the entire job so it is not bogged down in smaller details of specialised tasks. Usually, all member firms in the joint venture are represented on the roster of the management group, allowing proper acknowledgement and credit while enhancing the structure as a whole.

For projects which involve only two or three firms in work lasting less than a year, the second type of management is often better. When one group handles the administration of the job, decisions can often be made more swiftly and with greater consistency. This type of framework provides the clear-cut essentials for the project's success, provided that all parties have agreed to it in the contract.