



# **Universiti Sains Malaysia**

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## **Factors contributing to Strategic Decisions in Small and Medium-sized Enterprises**

**Nirmal Singh**

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# **Faktor-faktor yang menyumbang kepada Keputusan Strategik di Industri Kecil dan Sederhana**

## **Abstrak**

Keputusan yang strategik merupakan faktor yang penting dan panduan utama dalam bidang pengurusan strategik. Terdapat beberapa pembolehubah menyumbang kepada pembuatan keputusan tersebut. Pengukuran yang biasa digunakan adalah keberkesanannya. Walaubagaimanapun, tumpuan kajian ini adalah pada pembentukan rangka model dari dua pembolehubah tak bersandar, yakni intuitif dan kepandaian yang berkompetitif. Kajian ini bertujuan untuk melihat kepada perhubungan di antara kepandaian yang berkompetitif dan intuitif kepada pembuatan keputusan, sebagai pembolehubah bersandar. Hasil kajian ini menunjukkan bahawa kepandaian yang berkompetitif berhubung secara negative dengan keputusan strategik, di mana hipotesis pertama yang mengatakan bahawa kepandaian yang berkompetitif berhubung secara positif dengan keputusan strategik ditolak. Hipotesis kedua pula yang mengatakan bahawa intuitif berhubung secara positif dengan keputusan strategik disokong oleh hasil kajian ini. Kajian ini menyimpulkan bahawa perlunya pengaliran maklumat untuk pembuatan keputusan strategik.

## **Factors contributing to Strategic Decisions in Small and Medium-sized Enterprises**

### **Abstract**

Strategic decision is being viewed as one of the important factor and the driving force in the field of strategic management. There seems to be quite a number of contributing variables towards the outcome of the decision. The standard measurement usually will be the measurement of the effectiveness. This study focuses on the development from two contributing independent variables, competitive intelligence and intuitive synthesis. The objective of this study is to look at the relationship of competitive intelligence and intuitive synthesis towards the outcome of the strategic decision, as the dependent variable. The outcome of this study reveals that competitive intelligence negatively related to strategic decision, thus the first hypothesis which test whether competitive intelligence positively related to the strategic decision was rejected. The second hypothesis which stated that intuitive synthesis positively related to the strategic decision was supported by the findings. This study reveals the need for information generation in strategic decisions.

# **Chapter 1**

## **INTRODUCTION**

### **1.0 Introduction**

Decision making is an exercise one makes everyday. In the organizational context, decision differs according to the level of organization hierarchy. To simplify, there are two types of decision in the organizational context. They are tactical decision and strategic decision (Walczak, 2005). Tactical decision is the type of decision made on day-to-day basis, mostly by middle and lower level of organizational structure. Whereas strategic decision is a decision made at managerial level. This type of decision determines the future of the organization. In short, strategic decision is a type of decision made by the management team to drive the organization forward towards achieving their vision, inline with their mission, objectives and goals. Thus, strategic decision is also part of managerial decision (Walczak, 2005).

Organizational behaviour is one of the fundamental in decision making (Yang, 2003). From dominant theory point of view, decision making involves individual psychological process. From the organizational context, decision making situation arised when there is a need to solve a problem or problems. Thus, 3 situational variables cluster are identified. They are the nature of the problem, disposition of the decision-maker, and the organizational context (Yang, 2003).

Douglas (2005) on the hand further proposed on the use of “naturalistic decision theory” for decision making in business environment. This type of differs than previous theory as it is based on the decision makers natural settings. In his study, entrepreneurship from “naturalistic” decision theory tend to make decision based on the individual, or

entrepreneur characteristics', thus having tendency towards biasness as there is no standard or formal process.

The requirement of formal process may be required depending on the decision made. As mentioned earlier, these theories may be applicable in terms of tactical decision as the requirement in this type of decision is more structured comparing to managerial decision.

The history of decision making at managerial level further emphasize on managerial decision making at the strategy level. In terms of managerial decision from the discipline of strategy, strategic management formulation has evolved into four phase's post-World War II era (Hunter and O'Shannassy, 2007). The evolution phases are:

- Phase 1: basic financial planning (1950s) - the decision made typically relies on the financial budget. The effectiveness of the decision solely depended on the quality of the Chief Executive Officer and the top management team, and their knowledge of the products, markets, and rivals.
- Phase 2: forecast-based planning (1960s) - the organization look into environmental analysis, multi-year forecasts, and static resource allocation from demand growth. The strategic decision fosters a rational and analytical approach. The introduction of SWOT analysis, for clearly defined scope and growth direction were used as part of the strategic decision process. These additional decision rules were needed for the firm to enhance its growth, orderly and profitably.
- Phase 3: strategic planning (1970s) - require thorough situation analysis and review of competition, evaluation of alternative strategies and dynamic resource allocation. At this phase also simplified frameworks for strategic analysis were introduced, such as experience curve, Boston Consulting Group's (BCG) portfolio matrix, and the Profit Impact of Marketing Strategies (PIMS) empirical project.

- Phase 4: strategic management (1980s) - a number of strategies introduced. Porter's structure-conduct-performance theory was one of the important contributions in the industrial-organization economics. The five forces analysis, the value chain, the diamond model, and strategy as an activity system were introduced.
- Phase 5: strategic thinking (1990s) - lean manufacturing, business process reengineering, and benchmarking were introduced. Strategic decision at this stage emphasize on competitiveness. The evolution of the business trend worldwide have placed great emphasis on the threat and opportunity which the firm may create competitive advantage.

Current strategic management studies have further emphasized on the strategic choices and the decisions made. Parnell (2005) further supported that right decisions on the strategic choices being a critical measurement of their ability. Thus managers nowadays spend more time involving in strategic decision process, in terms of information generation to make effective strategic decision.

There are many variables contributing to strategic decision-making. Pech and Slade (2003) claims that good strategic decision enables the organization to defuse competitors "threat and command certain degree of control in the market from the competitors". The generation of intelligence by Finnish organization further support the importance of competitive intelligence in strategic decision-making (Hannula & Pirttimaki, 2003). McGonagle and Vella (2002) further proposed the importance of competitive intelligence, whereby 37% of the organization daily activities use this type of intelligence. Regel (2003) suggested that intuition improves strategic decision. The role of intuition in effective managerial decision-making reveals that strategic decision based on non-logical and non-intellectual is one of the contributing variables towards strategic decision (Novicevic, Hench & Wren, 2002).

## **1.1 Background of study**

The emphasis on the decision-making is important for the organization. Managerial decision, also referred as strategic decision, is very important for organization such as those in Small and Medium-sized Enterprises as this is the type of decision were made for the future of the organization.

The current trend of market towards globalization and competitive market, pose continuous challenges faced by Small and Medium-sized Enterprises (O'Regan, Sims & Ghobadian, 2005). A clear and well strategize decision can enable the company to defuse the threat faced by the Small and Medium-sized Enterprises from the bigger and stronger organizations (O'Regan et al, 2005).

As the backbone of an economy, Small and Medium-sized Enterprises pose a key and vital component of the economy (Salles, 2006). Its contribution is significant enough for the development of the country's economy. Salles also echoed O'Regan et al that the heat of globalisation, Small and Medium-sized Enterprises faced greater intensity with increasing competitiveness as these organizations are being exposed to continuous threat especially from the Multinational Corporations.

To succeed for survival, the strategic thrust for the future requires significant impact of strategic thinking and decision-making (Temtime, Chinyoka & Shunda, 2003). Since most Small and Medium-sized Enterprises are run by owner-manager, internal aspects of Small and Medium-sized Enterprises environment have been demonstrated to have influence on strategic decisions rather than external variables (Becherer, Finch & Helms, 2006). Bear in mind, that strategic management procedure of large enterprise may not be relevant and applicable to Small and Medium-sized Enterprises (McCarthy, 2003).

This study will be focusing on the Small and Medium-sized Enterprises in Penang state. From the list of companies listed in SMIDEC, there are 1802 Small and Medium-sized Enterprises companies registered in Penang state (SMIDEC, 2008). Further investigations reveal that only 939 companies are still operating under Small and Medium-sized Enterprises criteria. Some had ceased operation or grown into bigger companies and multinationals.

## **1.2 Research Problem**

The openness of the economy due to globalization, the pressure felt by Small and Medium-sized Enterprises in this region requires a study on the way one's organization make decision strategically and the factors contributing to the decision made. The variables contributing to the strategic decision made will be important for future studies in formulating a framework helping local economy to be resilient. Furthermore, Small and Medium-sized Enterprises contribute significantly to the economy. The various studies have look at Small and Medium-sized Enterprises in United Kingdom, Greece, and other countries, but have yet to find studies on the local context especially on Small and Medium-sized Enterprises in Penang.

The importance of Small and Medium-sized Enterprises also be emphasized by our current government as bigger companies and multinational companies are looking at avenues of relocation due to increase cost of operation, especially the labour cost. For multinationals to relocate elsewhere will be easier as these companies have the resources and capabilities to do it. Whereas, Small and Medium-sized Enterprises will find it difficult to relocate elsewhere due to limited resources. The effectiveness of strategic decision is important in Small and Medium-sized Enterprises sector as the success and failure of the decision outcome give great impact to future of the organization to remain in the business. Furthermore, the failure of this

type of decision will cause cessation of operation as these organizations are rather small in their set-up, hence unable to recover from the wrong decision made.

Based on experience, we do come across of organizations fails and falls due to wrong decision made by the managers. The question arised on what constitute to the decision made. Most of these researches have studied on western countries environment, whereas Nooraie (2002) studied on the strategic decision making process in general. Therefore the problem being investigated here is the outcome of the strategic decision made, whether the decision-maker are satisfied with their decision with the quality of the decision made. This study will look into the local context from the Small and Medium-sized Enterprises sector, from the quality of the decision outcome and the satisfaction of the decision itself.

This study aims to investigate the contributing factors towards the decision made. There are two contributing variables identified from the literature, they are Competitive Intelligence and Intuitive Synthesis. What would like to be tested here is the relationship of these variables towards strategic decision making.

### **1.3 Research Objectives**

The objective of this study is to look at the relationship of the variables between the competitive intelligence towards strategic decision making, and the relationship of intuitive synthesis towards strategic decision making. This study intends to establish these variables contributing towards strategic decision, whether both competitive intelligence and intuitive synthesis contributing towards strategic decision in the Small and Medium-sized Enterprises industries.

## **1.4 Research Questions**

This study seeks answers to the questions mentioned below:

- 1) Do competitive intelligence influence the strategic decision made?
- 2) Do intuitive synthesis influence strategic decision made?

## **1.5 Definition of Key Terms**

A strategic decision is an unstructured decision which determines the health of the organization (Harrison, 1996). It is also known as a managerial decision.

Competitive Intelligence can be defined as “a systematic and ethical process for gathering and analyzing information about the competition’s activities and general business trends to further a business’ own goals”, by Society of Competitive Intelligence Professional (SCIP) (Groom & David, pg. 13, 2001).

Intuitive can be defined as an instinct of inner feelings of the individual. It means of being able to bring to bear on situations (Khatri & Ng, 2000).

“Gut-feeling” can be defined as a sense of internal feeling – feel in their stomach, or burst of enthusiasm and energy (Khatri & Ng, 2000).

Judgment is outcome of certain decision. In the absence of adequate information and without precedent, judgment is “simply analyzes frozen into habit and into the capacity for rapid response through recognition” (Khatri & Ng, 2000).

Small and Medium-sized Enterprises (SMEs) can be defined as an organization operated consisting of not more than 250 employees and RM 25 million revenue (SMIDEC).

Top Management Team is the highest level of the organization’s management team which consists of Chief Executive Officer or Managing Director, General Managers and top executives of the organization involve in strategic decision making (Nooraie, 2002).

## **1.6 Significance of Study**

The underlying focus of this study is to examine the relationships between competitive intelligence, intuitive synthesis and the strategic decision made. The investigation of the relationship between the independent variables and the dependent variables will be useful in the development framework for Small and Medium-sized Enterprises in terms of intelligence generation. The result of this study will add to limited body of literatures on strategic decision from the local setting. The findings of the study seek to contribute to the followings:

- The limited study on the use of competitive intelligence in making effective strategic decision.
- The decision makers' intuition synthesis in making strategic decision.

## **1.7 Organization of Remaining Chapters**

The following chapters will discussed the literature argument in chapter 2. Literature review will cover the variables of this study. From the literature argument, theoretical framework will developed by using gap analysis from previous researches related with this study variables. Thus, hypothesis development will be based from this analysis. The subsequent chapter, chapter 3, will be discussing the methodology of this study. This chapter will summarize the method to be used focusing only for this study. In chapter 4, the results of this study outcome will be presented. These results will be related from the method used mentioned in chapter 3. Finally, this study discussion will be concluded in chapter 5. Discussion will only focus on the outcome of the results to avoid misleading argument which may deviate the discussion of the study.

## **Chapter 2**

### **Literature Review**

#### **2.1 Introduction**

Decision making is the most significant activities in which the manager engaged in, at any level in the organization (Harrison, 1996). The process is based on individual judgment on a certain action from the situation persists (Harrison, 1996). The effectiveness of decision making can be viewed from the complexity of the decision to be made itself. It also looks at the intelligence of the decision-maker (Benson and Dresdow, 2003). This is part of mental model being used to determine and produce the outcome.

Baum and Wally (2003) presented 5 intertwined rational decision-making process stages. These stages of process viewed from the managerial decision-maker, or also known as strategist in the industry, consists of;

- attention to problem or opportunity arised,
- information collection or gathering,
- development of array of options,
- value the options by looking at the expected costs and the benefits,
- selection of option which provide the greatest utility.

These stages are viewed from the strategist perspective. Baum and Wally emphasized that rational decision-making model can be used in strategic decision as in the process of making strategic decision which also go through the same process. This process looks at the business settings, and viewed as powerful determinants in the business decision.

There are four approaches that decision makers create strategy (Eisenhardt, 1999). The decision makers create strategy by:

- Building collective intuition in stages through conducting regular meeting and real-time metrics that enhances the ability of a top-management team to see threats and opportunities earlier and more accurately.
- Stimulating quick conflict to improve the quality of strategic thinking without sacrificing significant time, by assembling diverse teams and challenging them through “Frame breaking” tactics (which will be explained later).
- Maintaining a disciplined pace that drives the decision process to a timely conclusion, to sustaining the momentum of the strategic choice.
- Defusing political behaviour that creates unproductive conflict and wastes time, to avoid destructive interpersonal conflicts.

This study is looking at the decision made at the strategic level. It is also part of decision made for the strategy of the organization. Further discussion from the previous literatures will be mentioned as follows in this chapter. Upon discussed on the variables of this analysis, theoretical framework is further developed from the research gap from previous research.

## **2.2 Review of Literature**

### **2.2.1 Strategic Decision**

Strategic decision is a complex and unstructured decision. This type of decision usually occurred and practice at the top level of the organization hierarchy. Strategic decision making is the fundamental capability leading to superior performance of the firm (Eisenhardt, 1999). The Economist defined the keywords strategy by answering to two basic questions, “Where do you want to go?” and “How do you want to get there?” (Eisenhardt, 1999). In decision making at this strategic level, all data and information are importantly gathered. The

decision makers do not only rely on accounting-based information, but all business related information and data as a whole (Eisenhardt, 1999). This is to ensure as predictive outcome as possible. Strategic decision requires strategic thinking capabilities of the decision-makers member. The conflicts among the decision-makers, if look at it positively, able to create decision-making effectively. “Frame-breaking” tactics is a way to accelerate conflicts among decision-makers in making strategic decision effective. This way is to create alternatives to obvious point of view. Among the techniques involve is scenario planning, whereby possible future states of the decision outcome being systematically considered by the team members. Another technique is to perform role-play of competitors by the executives whether favouring the decision or not (Eisenhardt, 1999). This tactics further support the requirement of alternatives generation to arrive to the decision outcome. The choice of the strategic decision to be made may vary, but the pattern and scope may be somewhat familiar. Strategic decision is a flow of shifting competitive advantage. Hence, the choice of the decision in shaping the organization strategy greatly matters (Eisenhardst, 1999).

Strategy also refers to the direction and scope of the organization over long term (McCarthy, 2003). The planning school of thought defines strategy as a formal plan, perform with detailed analysis of the company, its product-market and its environment (McCarthy, 2003). Whereas from the process school of thought, the focus is on the processes by which actions are decided and implemented (McCarthy, 2003). McCarthy (2003) further claims that strategic decision depends on the character of the decision maker.

Papadakis (2006) have sum up decision making models which explain strategic decision making process by stressing a few key points:

- These models are distinguished by a number of dimensions, including style of strategic decision making, the role of top management team, the role of the organizational members,

the criteria used, processes followed, assumptions on which they are based, environment suitability for each mode of decision making, the size of the firm, etc.

- None of the models captures the plethora of issues, concepts, dimensions and biases present in strategic decision making. They are indeed simplifications, explaining only small portions of very complex phenomena. Any decision model might be in the repertoire of any decision maker.
- The utilization of any model seems to be the interplay of a number of forces, such as corporate environment, managerial vision and perceptions, organizational learning processes, planning systems and various other internal and external forces.

Papadakis further emphasize that the Chief Executive Officer shape the process of the strategic decision made in the Greece Medium-sized companies. Papadakis sum up that the characteristics of the chief executive are moderately related to the strategic decision. Papadakis suggested that the need to look at the involvement of top management team as they are also involve in the strategic decision process. Since Papadakis studied in the Greek context, a broader perspective require to future study.

In terms of strategic decision making process, Nooraie (2002) sums up 5 stages process. Strategic decision making process stages are:

- Situation diagnosis or problem identification (first stage) – this stage determines the cause to the problem requiring the decision.
- Alternative generation (second stage) – this stage involves generation of solution alternatives to the problem.
- Alternative evaluation (third stage) – this stage involves the evaluation of all the alternatives generated earlier in the second stage.

- Strategic decision choice or selection (fourth stage) – this stage chooses the most appropriate alternative to the problem.
- Decision integration (fifth stage) – integrates the decision to the problem upon selecting the best alternative in the previous stage.

The rationality of the decision look at the involvement of third party (outsider) in the process stage, formality of the problem analysis whether the decision made by one individual or more with the extensiveness of analysis done, direct costs incurred or willing to spend, and the number of employees were directly involved.

Decision making process differs according to industries and the size of firms. Decision making process in Small and Medium-sized Enterprises differ than the decision process in larger firms. This implies that many of the strategic decision making models may not be suitable for strategic decision making in Small and Medium-sized Enterprises. Managers in Small and Medium-sized Enterprises are more susceptible to the use of decision making biases and heuristics than managers of larger firms. Furthermore, larger firms and multinational companies have their strategic division, whereby the members' focuses on strategic decision for the organization.

The current study will be looking at the strategic decision outcome, rather than the process. Hence, the instrument of this study adopt Nooraie's instrument measuring the quality and the satisfaction of the strategic decision. 5-point Likert scale was used with "1" being "Strongly Disagree" and "5" being "Strongly Agree".

The effectiveness of the strategic decision outcome was further measured by the quality of the decision output and the satisfaction with the decision made. The decision of the study is based on the type of the decision made the respondent which was mentioned earlier in

the first part of the questionnaire. The details of the instrument will be explained in the following chapter.

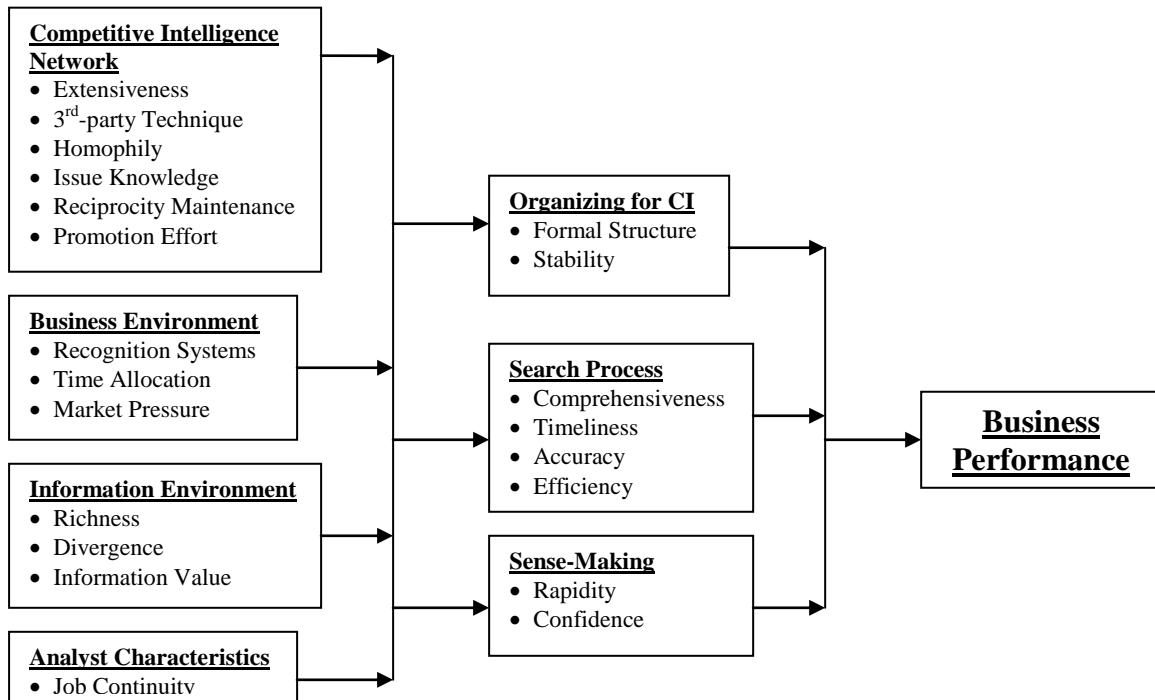
Nooraie's study looks at wide range of contextual factor, whereby the research was done on the general of all kind of organization. Whereas the need to focus on the specific sector may be required to differentiate the type of strategic decision made and the level of satisfaction and the quality of the decision, as mentioned earlier in chapter 1 that strategic decision made in Small and Medium-sized Enterprises may differ from the decision made by bigger companies.

## **2.2.2 Competitive Intelligence**

Competitive Intelligence (CI) can be defined as "a systematic and ethical process for gathering and analyzing information about the competition's activities and general business trends to further a business' own goals", by Society of Competitive Intelligence Professional (SCIP) (Groom & David, 2001). This intelligence depends on legal and ethical information gathering and analyzing from any published literature and human sources for decision making to counter competitors' strategies, emerging industry trends, and potential threats (Groom & David, 2001). These information become competitive intelligence upon being analyzed and any kind implications provided for strategic planning and decision making. Based on literature, usually 70% - 90% of intelligence needed is possessed by its employees through information gathered from suppliers, customers, and other industry contacts. On the other hand, Groom and David (2001) suggested that it is a common practice for the managers to conduct competitors' analysis. It is a very useful and important tool for competitive intelligence to obtain and gather information for strategic management process. While this

analysis set to be a standard information gathering, leading-edge organizations require a well developed competitive intelligence program structure.

Jaworski, Macinnis and Kohli (2002) further produced a conceptual framework on competitive generation in organizations which can refer to Figure 1. From their study, they mentioned that strategy formulation is important to ensure effectiveness of the strategy formulated. Anyway, he presented on the formulation of marketing strategy. Hence, there is require to test the framework on strategic decision level as marketing strategy formulation may also involve the lower level of employee in the organization.



*Figure 1. Generating Competitive Intelligence in Organizations (Jaworski, Macinnis & Kohli, 2002).*

McGonagle and Vella (2002) have outlined competitive intelligence into 2 facets. One is the utility of public sources to develop raw data and the other is to transform them by analysis into information. Public sources here mean that all information which is legally and

ethically identified, located, and then accessed. The ability to transform the data into actionable information by the individual is called competitive intelligence.

Hannula and Pirttimaki (2003) claims that competitive intelligence is very helpful for the decision maker or the organization make strategic decision. Their research mentioned that competitive intelligence is being one of the main components in business intelligence. Their study stressed that there is increasing application of competitive intelligence in business intelligence for strategic decision. From the study, there is a need to look at competitive intelligence as a component by itself for strategic decision making. But then again, their research is based on only 50 top ranking Finnish companies. Hence, the study suggested of the need on broader view for future research.

The importance of competitive intelligence in strategy formulation was further mentioned by Hodges (2005). The need to interpret information requires competitive intelligence for competitive analysis. Hodges presented that competitive intelligence enable strategy formulation, and having it will enable the organization to make the right decision. Hence, further study on strategic decision from competitive intelligence is needed.

Agarwal (2006) have presented that competitive intelligence improve business decision. But his study use secondary data. Furthermore, he also looks at the general business decision which includes tactical and strategic decision of the organization. The study concludes that competitive intelligence improves business performance with effective business decisions. But again, future research need to gather information based on primary data to get the clearer picture on its effectiveness.

To further study on the use of competitive intelligence, an instrument was adopted from Groom and David (2001). A 10-item instrument was constructed by Groom and David on their research focusing the competitive intelligence in United Kingdom Small and

Medium-sized Industries. The sample of the questionnaire can referred as attached in Appendix A.

### **2.2.3 Intuitive Synthesis**

Managers at times make their decision based on 'gut-feeling', as most of these decisions are unstructured. These unstructured decision made by these managers were usually crucial towards the organization well-being. Gallen (2006) have presented that intuition contribute to this type of decision as being viable for the future of the firm. Her studies on the cognitive style of the managers in Spa industry, provides that sensing/intuition affect the strategic decision by these decision-maker. Hence, broader scopes of study require to be tested on this relationship in other industry to support her studies. This is because different industry have different set-up and different outcome may appear.

McCarthy (2003) further exclaimed that charismatic decision-maker use gut-feeling during making strategic decision. The internal feeling may also develop through the experience attained. These intuitive syntheses are very important as it determine the success and failure of the decision made by the decision-maker. As the characteristics of the entrepreneur were studied, it may also reflect the individual involved in the strategic decision according to their level of position in the organization. From here, future studies may look at whether the intuition made by entrepreneur may differs than managers, as entrepreneur feels that their business at stake rather than the managers whom feels that they are more secured.

Intuition is a critical role in any kind of decisive behaviour. It is viewed that various forms of knowledge bonds together, thus integrating thought and action. In the management contexts, intuition was being recognized as the pivotal role for non-logical decision-making (Novicevic et al, 2002).

To further support that intuition improves strategic decision, Regel (2003) further provides the evidence through his paper. His survey showed that 47% of the market surveyed oftenly use intuition for strategic decision in their organization. Regel also defined intuition as immediate cognizance or conviction without rational thought. It implies a lack of a precise decision rule or strategy in contrast to analytical, a step-by-step, logically defensible decision-making process. In short, this judgment made based on sub-conscious level of mind.

During mind-mapping process towards decision-making, sub-conscious mind develop from experience attained throughout one's career will also help oneself make his/her decision. From strategic management view point, parts of intuitive synthesis are also based on experience towards strategic decision (Sinclair & Ashkanasy, 2005). Sinclair and Ashkanasy develop a model based on the decision making across the organization. It would be deem relevant to study on the relationship of intuition in strategic decision. The relevance between intuition and strategic decision are that both are unstructured and complex.

Collonsin and Houlden (2005) further supported experience as one of the component contributing to market knowledge in decision making for internationalization. The decision to venture into international market is also a type of strategic decision, a study on experience rather than market knowledge would be of benefit to understand that the experience gained enable the managers to make strategic decision.

Intuitive synthesis was further studied based on these three facets. The construct of the study measurement consistent with the instrument adopted from Khatri and Ng (2000). Khatri and Ng claims that the use of intuition will usually occur whenever there is insufficient information available and the decision need to be made immediately, on-the-spot. Thus this study will be able to understand strategic decision outcome from intuition whenever there is lack of information compare to competitive intelligence as information were available.

## 2.3 Theoretical Framework

There are many variables contributing towards strategic decision making. This study will focus on two main variables, competitive intelligence and Intuition, contributing to the effectiveness of the strategic decision made.

Based on the gap analysis from Appendix B, there were limited researches looking at the relationship of these variables in strategic decision outcome. Some of these have already argued in literature reviews in previous section. In general, there have yet a framework development on strategic decision made from competitive intelligence and intuition in Small and Medium-sized Enterprises. Thus the development of the conceptual framework is depicted in Figure 2

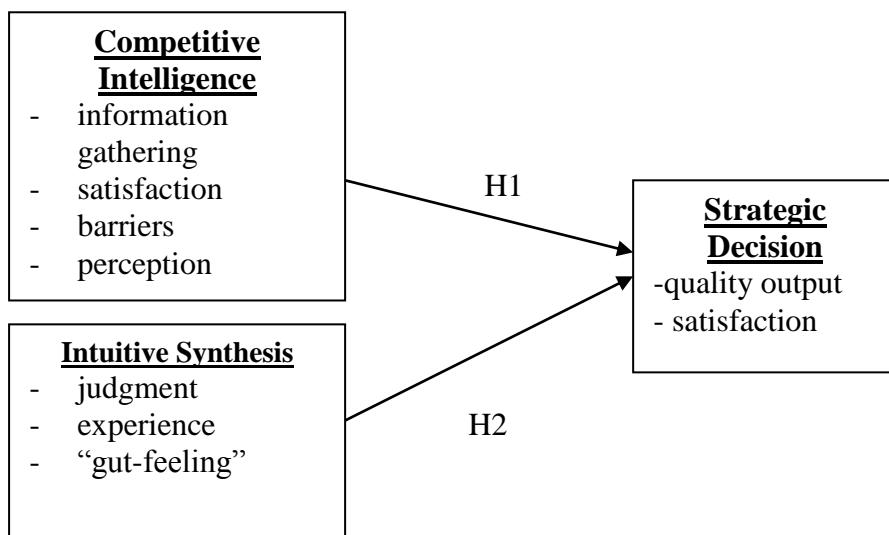


Figure 2 : Theoretical Framework.

The underlining theory is based on the extension development from Rational Decision-Making Theory (Baum & Wally, 2003). From the argument, this study hypothesizes:

H1 : Competitive intelligence positively related to strategic decision made.

H2 : Intuitive Synthesis positively related to strategic decision made.

## **2.4 Summary**

This research will enable us to understand the way the Top Management Team of the Small and Medium-sized Enterprises in the Penang make strategic decision. It is important to know if there is sufficient intelligence available to compete with the threat face by the organization through globalization, hence to stay competitive. There is also the habit of Top Management Team in this sector use intuitive synthesis in making strategic decision. It may look important if their intuitive is really benefitting the organization facing the challenges ahead. For us to move forward, economically, emphasize on strategic decision plays pivotal role as a driving force to move the organization along.

## **Chapter 3**

### **Methodology**

#### **3.1 Introduction**

The methodology of this study will be further explained in this chapter. The explanation includes the research sample, the sector of the organizations which involved in this research, data collection from the questionnaire receipt, the research design, and also most importantly the hypothesis testing.

#### **3.2 Research Design**

The focus of this study is to understand the contributing variables towards strategic decision made for the organization. This study will only focus on the Small and Medium-sized Enterprises sector in Penang state. The unit of analysis is the Top Management Team of the organization. Top Management Team of the organization in Small and Medium-sized Enterprises may include those involve at higher level of the organization participating in the strategic decision making process. In Small and Medium Size Enterprises, department manager may also involve strategic decision compare to the department managers in larger firms. Larger firms have their own strategic team making strategic decision and department managers making tactical decision. Their position title may also vary as there is also an organization top management team members with the position of senior executive. This organization is practically new and small in their set-up.

The instruments of this study are questionnaires adopted from previous research. The strategic decision questionnaire was adopted from Nooraie (2002), with Cronbach's Alpha = 0.83. Competitive intelligence questionnaire was adopted from Groom and David (2001). The other variable, intuitive synthesis questionnaire was adopted Khatri and Ng (2000).

Cronbach's Alpha = 0.61. Since the Cronbach's Alpha is above 0.60, the instruments deem valid to be used for this study (Finkelstein, 1992).

### **3.3 Variables**

There are three main variables involve in this study. The variables are strategic decision as the dependent variable, competitive intelligence as the independent variables, and intuitive synthesis as another independent variable. The independent variables are the contributing variables towards the dependent variables. This study would like to look at whether the independent variables are positively related to the strategic decision. Thus, regression analysis is best suited for this study analysis.

### **3.4 Population/Sample**

From the market survey, there are 939 Small and Medium-sized Enterprises in Penang state which is still operating. Each organization was given 2 sets of questionnaires to their Top Management Team. The questionnaires were distributed via mails and emails, thus totalling the amount to 1878 - 939 companies x 2 set of questionnaires each. Strict confidentiality was made. In order to carry out advanced statistical analysis, Hair, Andersen, Tathem & Black (2006) mentioned that minimum of 100 samples able us to run the analysis. Out of 1878 questionnaires distributed, only 105 respondents responded. Thus, yielding the response rate to 5.59%.

Regular follow-up and reminder were made via emails and telephone calls, upon distribution of the questionnaires. Being member of the organization top management team, the tight schedule of the respondents and their focus towards their business as their main priority was one of the main reasons resulting to the low response rate. Furthermore, with the

fast pace business environment of the Small and Medium-sized Enterprises, further contributed to the low response rate as lack of attention for this study. Anyway, all of the responded questionnaires are usable. Table below summarize the response.

Table 3.1  
*Data Collection Response Result*

<b>Questionnaire distributed</b>	<b>Responded</b>	<b>Response rate</b>	<b>Response usable</b>
939 x 2 = 1878	105	5.59%	100%

### **3.5 Procedure**

Upon collection of data from respondents, SPSS were used as the tool to analyze the data. SPSS versions 12.0.1 for Windows which are readily available in the market were used. SPSS were deemed to be a powerful tool and widely use for researches. The reason SPSS were use is to understand relationship of the variables, hence even from previous researches uses regression analysis for their research analysis which enable better explanation of this study through SPSS.

### **3.6 Measures**

The instrument was divided into 5 sections.

- 1) Specific Strategic Decision specifies the type of strategic decision made for the past 24 months. This section uses validated instrument adopted from Nooraie (2002).
- 2) Section A covers general information about the respondent which includes job title, position in the organization hierarchy, years of service and years in current position, education background, age, gender, and race. It also uses validated instrument adopted from Nooraie (2002).

- 3) Section B covers the competitive intelligence portion. This validated instrument was adopted from Groom and David (2001).
- 4) Section C covers intuitive synthesis part with validated instrument adopted from Khatri and Ng (2000).
- 5) Section D covers the dependent variable part with the strategic decision made from section A, also adopted from validated instrument from Nooraie (2002).

### **3.6.1 Specific Strategic Decision**

This section requires the respondent to specify the type of strategic decision made for the past 24 months with the participation of the respondent. The respondents require to briefly describing the decision made, in the space provided. Anyway, there are several types of example were given in this section, which includes strategic decision related to plant and equipment, investment and location, diversification, new product, new markets, research and development program, reorganization, top management personnel decisions, external environment management such as corporate identity definition and projection, or decision related to major labour policy decisions.

### **3.6.2 General Information**

This section captures the respondent personal and job background. This section will only be use to analyze in terms of descriptive analysis. Among the items asked are Position/title, Position level, Numbers of years of service in the current firm, Numbers of year in current position, Education level, Field of study, Age, Race, and Gender.