

BUSINESS STRATEGY, ENVIRONMENTAL UNCERTAINTY, BALANCED  
SCORECARD AND PERFORMANCE AMONG MALAYSIAN SMALL AND  
MEDIUM ENTERPRISES

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This thesis is dedicated to my inspiring parents, and  
brother for their endless love, encouragement,  
support and sacrifices.

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## ABSTRACT

The Balanced Scorecard (BSC) initially a tool for measuring performance is now recognised as an approach for strategy implementation. Based on literature reviewed, previous studies have mainly been carried out on the use of BSC in large businesses. However, research on its usage in small and medium size enterprises (SMEs) is very limited. Businesses must have a well-developed strategy to implement BSC, but SMEs tend to have poor strategic planning. Besides that, SMEs suffer from scarcity of financial resources and are vulnerable to external environment and cannot influence the market. Being responsive to the market is a positive characteristic for SMEs but this can be problematic when applying BSC, because changes in strategy due to market dynamism is one of the main causes of BSC failure. The objectives of this study are to discover how BSC implementation is affected by SMEs' business strategy and environmental uncertainty, and to determine the influence of this relationship on SMEs' performance. This study utilised the contingency theoretical framework to evaluate the relationship between SMEs' strategy, environmental uncertainty, BSC implementation and SMEs' performance. Moreover, the influence of financial resources as a component of internal environment on business strategy of SMEs was investigated based on resource-based theory. Data were collected from a survey among 300 Malaysian SMEs. Partial least squares (PLS) technique was employed to analyse the data. The findings indicated that BSC, as a strategy implementation system enhanced SME's performance and its effectiveness was influenced by the SMEs' business strategy. On the other hand, firms' financial resources significantly influenced the business strategies of SMEs. Having access to adequate financial resources enabled SMEs to develop a clear business strategy. SMEs with a clearer organisational approach was more successful in BSC implementation and consequently had better performance. The results suggested that BSC implementation acts as a mediator between SMEs' strategy and SMEs' performance. Additionally, successful implementation of BSC depends on the level of environmental uncertainty. Based on the findings, a distinctive BSC should be designed to suit SMEs' business strategy and market environment especially in developing countries such as Malaysia.

## ABSTRAK

Kad Skor Seimbang (BSC) yang dulunya merupakan alat untuk mengukur prestasi kini lebih dikenali sebagai satu pendekatan dalam pelaksanaan strategi. Berdasarkan semakan literatur, kebanyakan kajian lepas telah dilakukan ke atas penggunaan BSC dalam perniagaan besar. Walau bagaimanapun, kajian tentang penggunaannya dalam perniagaan kecil dan sederhana (SMEs) adalah amat terhad. Perniagaan harus mempunyai strategi pembangunan yang kukuh dalam melaksanakan BSC, tetapi SMEs cenderung mempunyai perancangan strategik yang lemah. Di samping itu, SMEs terjejas daripada kekurangan kewangan dan terkesan kepada persekitaran luaran serta tidak mampu untuk mempengaruhi pasaran. Berupaya bertindak balas terhadap pasaran merupakan satu ciri positif bagi SMEs, namun situasi ini boleh menimbulkan masalah apabila BSC dilaksanakan, kerana perubahan dalam strategi ekoran daripada kedinamikan pasaran adalah salah satu penyebab utama kegagalan BSC. Objektif kajian ini adalah untuk mengetahui bagaimana pelaksanaan BSC dipengaruhi oleh strategi perniagaan SMEs dan ketidaktentuan persekitaran serta untuk mengenal pasti pengaruh hubungan ini terhadap prestasi SMEs. Kajian ini menggunakan kerangka teori kontigensi untuk menilai hubungan antara strategi SMEs, ketidaktentuan persekitaran, pelaksanaan BSC dan prestasi SMEs. Seterusnya, pengaruh sumber kewangan sebagai satu komponen persekitaran dalaman dalam strategi perniagaan SMEs telah juga dikaji berdasarkan teori berasaskan sumber. Data dikutip daripada tinjauan di kalangan 300 SMEs Malaysia. Kaedah kuasa dua terkecil separa (PLS) digunakan untuk menganalisis data. Dapatan kajian menunjukkan bahawa BSC, sebagai satu sistem pelaksanaan strategi meningkatkan prestasi SMEs dan keberkesannya dipengaruhi oleh strategi perniagaan SMEs tersebut. Sebaliknya, sumber kewangan firma mempengaruhi strategi perniagaan SMEs secara signifikan. Mempunyai akses kepada sumber kewangan yang mencukupi membolehkan SMEs membangunkan strategi perniagaan yang lebih jelas. SMEs yang mempunyai pendekatan organisasi yang jelas lebih berjaya dalam pelaksanaan BSC dan seterusnya mempunyai prestasi yang lebih baik. Dapatan kajian mencadangkan agar pelaksanaan BSC berperanan sebagai perantara antara strategi SMEs dengan prestasi SMEs. Di samping itu, pelaksanaan BSC yang berjaya bergantung kepada tahap ketidaktentuan persekitaran. Berdasarkan dapatan kajian, BSC yang berbeza perlu direkabentuk untuk memenuhi keperluan strategi perniagaan SMEs dan persekitaran pasaran terutamanya dalam kalangan negara membangun seperti Malaysia.

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## LIST OF ABBREVIATIONS

AAA	-	American Accounting Association
AEC	-	Asean Economic Community
ASEAN	-	Association of South East Asian Nations
AVE	-	Average Variance Extracted
BSC	-	Balanced Scorecard
BSCI	-	Balanced Scorecard Implementation
CMB	-	Common Method Bias
CBV	-	Common Method Variance
CR	-	Composite Reliability
EPF	-	Employee Provident Fund
ES	-	Environmental Scanning
EU	-	Environmental Uncertainty
FTA	-	Free Trade Agreement
GDP	-	Growth Domestic Product
GR	-	Gate Review
IIBS	-	International Institute of Banking and Finance Services
MBV	-	Market-Based View
MCS	-	Management Control System
MEC	-	Mixed Economy Company
MSIE	-	Marketing Strategy Implementation Effectiveness
NSDC	-	National SME Development Council
OECD	-	Organization for Economic Cooperation and Development
PEU	-	Perceived Environmental Uncertainty
PgM	-	Program Management
PLS	-	Partial Least Squares
PMO	-	Project Management Office
PMS	-	Performance Measurement System

PPB	-	Planned Pattern Behaviour
PSD	-	Public Service Department
RBV	-	Resource Based View
SEM	-	Structural Equations Modeling
SME	-	Small and Medium Enterprise
STV	-	Subject To Variable
TQM	-	Total Quality Management



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## CHAPTER 1

### INTRODUCTION

#### 1.1 Background of Study

Performance measurement systems are traditionally based on financial indicators which focus on short term view strategy. These ways of evaluating performance are inadequate for managers to run businesses effectively (McCunn, 1998) since financial indicators are measuring historical or past performance. This one-dimensional approach caused errors and inconsistencies such as providing biased data and deficiency of any statistical analysis (Bititci *et al.*, 1998). In order to solve these problems and have a multidimensional view, the balanced scorecard (BSC) approach which considers both financial and non-financial measures has been developed.

The BSC was first introduced as a performance measurement system by Kaplan and Norton in 1992. It was intended to provide a summary of the most essential performance indicators of companies, and to align strategic plans to the business operations (Fernandes *et al.*, 2006). The founders of BSC planned to present a medium which could translate the vision of the company into a set of clear objectives. The companies' objectives are interpreted into a performance measurement system which efficiently communicates a concise, forward-looking strategic focus to the entire businesses (Kaplan and Norton, 1992). According to Fernandes *et al.* (2006), the BSC which was initially considered as a tool for measuring performance, is now recognized as an approach for strategy implementation. This is achieved because it creates alignment and focus. The success

of the BSC four perspectives is related to the consistency of perspectives and selected measures with the strategy of businesses (Fernandes *et al.*, 2006).

Kaplan and Norton (1992, 1996) basically targeted large organizations rather than the smaller ones. This can be noticed from their early studies of BSC. The most targeted users which were mentioned severally in these contexts are banks and large technology firms. Whereas, public sector organizations and SMEs have not received much attention (Chow *et al.*, 1997; Johanson *et al.*, 2006). SMEs employ a large number of global labor force, and they play a great role in business environment especially in job creation (Ayyagari *et al.*, 2007). SMEs can be recognized by three main features which are related to their annual revenue, paid up capital and total number of employees (Kureshi *et al.*, 2009). Nowadays, BSC is being popular among both large and small companies (Gumbus and Lussier, 2006). It can play a great role in translating firms' strategy into relevant performance measures. The complexity and formality of BSC may be diminished in SMEs, but neither its significance nor its efficiency will be influenced by the small size of these specific sectors (Von Bergen and Benco, 2004). However, there are some certain problems found by the SMEs implementing BSC.

SMEs experience a very dynamic process in strategy formulation and its linkage to operation (Gunasekaran *et al.*, 2001). This dynamism is a reflection of the ever increasing market turbulence that SMEs find themselves in (McAdam, 2000). Generally, SMEs cannot control the market and they have to adapt themselves with rapid changes of external environment. Being adaptive to the market leads SMEs to change their strategy frequently. According to Jennings and Beaver (1997), strategic management in small organizations is almost an unconscious process. SMEs do not follow any comprehensive framework for developing their strategy (Singh and Deshmukh, 2007). Therefore, they do not have any formalised strategy or pre-defined goals and objectives. It means that small companies prefer to informally define their short term objectives (Russo and Martins, 2005). On the other hand, smaller companies possess more constrained resources compared to larger ones (Bianchi and Noci, 1998). Insufficiency of resources affects the smaller companies to be more responsive to pressures of stakeholders compared to larger ones. It means

that, when larger companies are under an external pressure for the environmental changes, they more likely utilize resource slack for building corporate buffers to overcome the pressures for environmental improvements (Bowen, 2002). For instance, Aragón-Sánchez and Sánchez-Marín (2005) highlighted the influence of financial resources through the evaluation of the factors which could pressure SMEs. It is difficult for SMEs to run their businesses efficiently since they have problems to obtain financial resources from any entities (Salikin, *et al.*, 2014). In a broad sense, apart from their uncertain market environment, scarcity of their resources such as financial resources can influence the way they respond to changes occurred and consequently their business strategy. According to Da Costa Marques (2012), a flexible and informal management feature of SMEs is not always compatible with the high formalism and complexity of management systems such as the BSC.

As mentioned before, the BSC has evolved from performance measurement tool to a system of strategy implementation (Kaplan and Norton, 1996). Strategy implementation is an important concern in any organization. Numerous tools and methodologies are being practised and a good number of innovations are coming up continuously to address this challenge. According to Dias Jordão and Casas Novas (2013), BSC can be considered as part of management control system since it improves the process of corporate strategy implementation and its diffusion at various organizational levels. Although BSC can help organizations to translate strategy into goals and objectives which consequently can affect the firms performance (Farooq and Hussain, 2011), its usage is not a blueprint for success. This is because different firms operate at different levels of uncertainty. The ability of the BSC to inform managers on how to respond to the firm's level of uncertainty determines the success of the BSC as a management control system (Islam and Tadros, 2012).

Malaysian SMEs need to change their mindset to transform themselves to support the strategies of Malaysia to become a high income, developed country by 2020 (OECD, 2014). Meeting the Vision 2020 is a challenging task and a fresh approach is required to accelerate the growth of SMEs. Trade liberalization and global market orientation lead SMEs toward quality system implementation such as

BSC. Malaysian SMEs have been showed to implement BSC in their business units (Suprpto *et al.*, 2009). SMEs have played an important role in fostering growth, employment and income, and have been integral to Malaysia's economic transformation process. SMEs account for large proportion of business in Malaysia. Their contribution to export, employment and gross domestic product (GDP) is 19%, 57% and 32.5% respectively (Economic Census, 2011).

Since its inception, the BSC generated much enthusiasm and interest in Malaysia. However, there are only few studies which have been conducted on the use of BSC in Malaysia. It is worth mentioning that most of these studies focused on large companies rather than smaller ones. Studies show that BSC has been mainly used by large companies, for example, Malaysian Telecommunication (Othman *et al.*, 2006; Said, 2014), Public Service Department (PSD), Employees Provident Fund (EPF) (Majid and Som, 2008), and Malaysian local authorities (Ghani *et al.*, 2010). Studies show that BSC is implementable in Malaysian large organizations (Ghani *et al.*, 2010) as well as smaller ones (Suprpto *et al.*, 2009). There are several areas of research regarding the use of BSC in Malaysian companies mainly focus on BSC implementation regarding perception of managers, its problems, reason of adoption and generally the effect of this system on firm's performance. However, the contingent relationship between BSC and firm's specific features (e.g., business strategy and market environment) has not been elaborated. The available studies focused on identifying the potential problems and limitations regarding BSC implementation in telecommunication company (Othman *et al.*, 2006), investigating the role of cause and effect relationship in BSC implementation (Ong *et al.*, 2010; Othman, 2006), assessing the effect of BSC on firms' performance (Jusoh *et al.*, 2008; Ghani *et al.*, 2010), identifying the perception of managers regarding BSC implementation (Ayoub *et al.*, 2012), recognizing the role of the BSC as performance measurement system in SMEs (Suprpto *et al.*, 2009), and distinguishing the reason of BSC adoption in companies (Said, 2014). It can be concluded that SMEs have not been addressed comprehensively in past studies. Especially, the contingent effect of business strategy and environmental uncertainty on BSC implementation among SMEs has not been addressed yet. To the best of researcher's knowledge, there has not been any study evaluating the role of market

uncertainty on business strategy and BSC implementation and also examining the role of BSC in business strategy and performance linkage. Therefore, it is important to fill this gap and evaluate these relationships.

## 1.2 Problem Statement

While there is an extensive literature exploring the use of the BSC in large companies, there are only a few empirical evidences regarding the use of this system in small companies. To the best of the researcher's knowledge, SMEs appear to be neglected not only by Kaplan and Norton, but also by others. Very few contributions are directly linked to the use of BSC in SMEs (Andersen *et al.*, 2001; Hudson *et al.*, 2001; McAdam, 2000; Zinger, 2002; Tennant and Tanoren, 2005; Von Bergen and Benco, 2004; Gumbus and Lussier, 2006; Rompho, 2011; Taticchi *et al.*, 2010; Giannopoulos *et al.*, 2013).

Although only a limited number of studies conducted on the use of BSC in small organizations, the majority of them reveal that SMEs do not apply this system (Phillips and Louvieris, 2005; Russo and Martins, 2005; Kureshi *et al.*, 2009; Monte and Fontenete, 2012; Giannopoulos *et al.*, 2013) or do not implement BSC efficiently and successfully (Rompho, 2011; Phillips *et al.*, 2003; Pamela Muhenje *et al.*, 2013; Hanif and Manarvi, 2010). For example, according to Russo and Martins (2005), a great number of Portuguese small companies did not use BSC. This is just similar to the findings of Kureshi *et al.* (2009) who found that 61% of SMEs operating in north part of Pakistan did not have the experience of using this system. Additionally, findings of Sousa *et al.* (2005, 2006) indicated that BSC was not used in SMEs located in England and Portugal, although they have highlighted the significant role of this tool.

In relation to the previous studies, among the number of SMEs which have adopted BSC, it can be seen that it has not been implemented effectively. This means that it has been used only partially. According to Phillips *et al.* (2003), only two

perspectives (financial and customers) out of four were implemented in SMEs. Pamela Muhenje *et al.* (2013) revealed that among the manufacturing SMEs in Nairobi, most selected measures were related to financial perspective. Similarly, Hanif and Manarvi (2010) noted that mainly one perspective of BSC (customer) has been used in SMEs and the other three were considered insignificantly applied. In other words, it was not utilized completely and effectively.

According to the literature, there are different reasons why BSC is not effectively used in SMEs, these factors are as follows:

- Unawareness and limited knowledge about BSC (Tennant and Tanoren, 2005; Russo and Martins, 2005);
- Perception of inappropriateness (Giannopoulos *et al.*, 2013);
- Dominance of managers' approaches (Hanif and Manarvi, 2010);
- Lack of employees' skill and difficulty in understanding the process (Sousa *et al.*, 2005, 2006); and
- Short term planning, flexibility and frequent changes of strategy due to market dynamism (McAdam, 2000; Rompho, 2011).

Among the above mentioned reasons, the last one which refers to the nature of SMEs' business strategy and their market uncertainty is the one which needs to be studied since it is a very significant issue. Generally, management control system such as BSC would lead to improved performance and desired outcome if it acts in concurrence with other factors of the firm's environment (James and Elmezughi, 2010; Govindarajan, 1984, 1988). For example, according to Govindarajan and Gupta (1985), a good fit between the elements of the firm's external environment, the firm's strategy, and its choice of control system would result in better corporate performance. Therefore, evaluating the relationship between SMEs' business strategy, organizational environment (internal and external), BSC implementation, and performance is of great importance to know the cause and effect relationship between these elements. This can lead to finding out how BSC implementation causes an improved performance based on organizational environment and SMEs' business strategy.

On one hand, BSC needs a well-developed strategy in order to translate it into different financial and non-financial measures; on the other hand, market changes cause SMEs to be flexible in their strategy adoption (Mcadam, 2000). These two features are in conflict with each other as explained in detail in the following paragraphs.

Norreklit (2000) believed that the BSC relies on the concept of strategy developed by Porter (1980, 1996). Porter believed that competitive strategy formulation is based on the competitive forces available in the market where the company competes. Therefore, the strategy has to be based on the market segments to be served and companies should then identify the internal capabilities of business processes. This concentration is needed if companies plan to deliver their value proposition to the targeted customers in the market.

Generally, the BSC is a system that aims to align the implemented strategy to the one which was expressed in the plan. This is achieved by integrating the BSC into the existing management control system when it has been developed. According to Norreklit (2000), the measures of variables during the stage of planning could be benchmarked against existing competitors. However, the behaviour of competitors is not going to be observed continuously by BSC. This tool also does not monitor the environmental changes. This means that the nature of this model is static rather than being dynamic. The BSC does not consider any strategic uncertainty caused by involving risks in the events which could nullify and impede the adopted strategy. Norreklit (2000) believed that the BSC risks are too rigid since it focuses on what are needed to set a strategy rather than considering the factors which have a shocking or blocking effect on strategy. Asking what has to be done well in order to recognize the targeted strategy is insufficient. Rather, it is also essential to ask about the preventing external factors which could impede the realization of business strategy.

According to Porter (2004), strategy selection depends on how well businesses are aligned with the environment. Changes in environmental contexts lead firms to change their strategy and defined objectives (Garengo *et al.*, 2005). Generally, management is about responding to those changes such as uncertainty in



economic growth, improvement of technology as well as planning important activities for the functioning and structure of company as a whole (Hill and Jones, 2013).

One of the main characteristics of SMEs is related to their strategy formulation and planning system, this obvious and crucial feature has been highlighted severally by previous studies. Scholars have differently referred to SMEs' poor strategic planning such as being informal (Da Costa Marques, 2012), dynamic and emergent, very limited (Gunasekaran *et al.*, 2001), and short term oriented (McAdam, 2000; Singh *et al.*, 2008). Having a restricted overview of the market is another feature which leads SMEs to be incapable of controlling their competitive position. Instead of being able to drive the market, they have to be flexible and adapt to existing changes (Ghobadian and Gallear, 1996).

Additionally, the level of environmental uncertainty is much higher in SMEs both to enter and exit from the market bringing them a series of obstacles (Gica, 2011). This uncertainty leads SMEs to scrutinize external factors. Customer and technology are two important components of SMEs' external environment which were highlighted by numerous scholars (Saleh and Ndubisi, 2006; Singh *et al.*, 2008; Raymond, 2001). Frequent changes of market trends and shorter product life cycles lead SMEs to adopt latest technology (Saleh and Ndubisi, 2006). This means that SMEs need to upgrade their technological capabilities. On the other hand, customer's requirements and preferences are another environmental factors which need to be considered effectively. According to Bennett and O'Kane (2006) and Soh and Roberts (2005), one of the most important challenges in SMEs is to upgrade the partnerships with their customers. Therefore, the limitation of the BSC approach is not only specific to the nature of the SME business strategy but also to their market environment subjected to rapid changes (e.g., customer and technology). These changes are more frequent compared to larger organisations operating in much more stable market.

Regarding the above mentioned issue, Rompho (2011) conducted a study to explore the reasons of BSC failure among SMEs. The results of the study revealed

that the failure occurred due to the nature of SMEs' strategy which changed frequently. Rompho (2011) stated that during the BSC implementation, a number of measures were revised or even added to the existing ones. This is not in line with the suggestions in the literature that in the case of emergent strategy, measures are not affected and the only changes are related to introducing new initiatives (Kaplan and Norton, 2000). This idea was not apparently the case in Rompho (2011) study in which measures of learning and financial perspective did not change, while there was a need to revise measures pertaining to internal business process and customer perspectives. The author stated that within two years, measures of BSC perspectives were revised severally due to frequent changes in firm strategy which was inevitable in a rapidly changing market environment. This unstable situation created confusion among employees or even to the owners or managers. The company is also needed to acquire new data as a result of BSC frequent revisions and changes of measures. Therefore, the cause and effect relationship between BSC measures could not be traced which resulted in wasted effort and time.

According to numerous studies (e.g., Davis and Albright, 2004; Buhovac and Slapnicar, 2007; James and Elmezughi, 2010; Lin *et al.*, 2014; and Wu, 2014), performance can be significantly affected by BSC. According to Farooq and Hussain, (2011), BSC can positively affect organizational performance. The BSC method translates an organisation's strategy into performance objectives, measures, targets and initiatives. It is based on four balanced perspectives, which link them together with the concept of cause and effect. A proper balanced scorecard can predict the effectiveness of an organisation's strategy through a series of linked performance measures based on four perspectives including finance, customers, internal processes, employee learning and growth. This system provides feedback on internal business processes and external outcomes to continually improve organizational performance and results (Kaplan and Norton, 1991; 1996a; 2001).

As mentioned earlier, BSC is applicable in Malaysian SMEs as well (Suprpto *et al.*, 2009; Phillips *et al.*, 2003). There are numerous studies available which focused on the limitations of BSC; however, these do not specify limitations

that are specific to SMEs by nature, where a rapid response to change is necessary and inevitable. In this vein only one scholar, Rompho (2011) has conducted the study to evaluate the effect of Thai SMEs' strategic planning on BSC implementation as mentioned before. The scholar stated that his work would only be the beginning of more research in this area.

Taking into account the current gap in the literature, the aim of this study is to shed light on the role of Malaysian SMEs strategy and their market environment in BSC implementation. The challenges are related to the nature of BSC which is very strategically oriented and also nature of SMEs which is shallow in strategic planning and adaptive to the dynamic environment.

BSC implementation among Malaysian firms is also not free of problem. For example, Othman *et al.* (2006) referred to different challenges of BSC implementation among Malaysian telecommunication companies (e.g., ignorance of external environment by managers, difficulty of developing non-financial measure, etc.). However, there is no study that identifies the potential challenges of Malaysian SMEs in implementing BSC regarding their business strategy and their environment. Lack of study on this topic is mainly due to the fact that BSC has been used mostly by larger companies rather than smaller ones (Johanson *et al.*, 2006). Therefore, to the best of researcher's knowledge the available studies conducted on small companies are very few, and they are not generally in-depth regarding SME's noticeable features (e.g., market environment, business strategy).

Previous studies showed that Malaysian SMEs face numerous challenges that could consequently affect their business strategy and also BSC implementation. The challenges include lack of financial resources (Hashim, 2012; Zain *et al.*, 2012; Salikin *et al.*, 2014), restricted capacity for knowledge acquisition and technology management (SMIDEC, 2002), incapability of adopting technology, and lack of access to market/customer information (Ting, 2004). Additionally, strategy planning is also limited. According to Kee-Luen (2013), the Malaysian SMEs practice some form of strategic planning in order to improve, however, it is only occasionally. Malaysian SMEs tend to analyse organizational environment before making

decisions. Nevertheless, this will happen only on specific occasions or when facing certain opportunities or threats. Therefore, different challenges faced by SMEs (e.g., financial scarcity, incapability of adopting technology, lack of access to customer information) can lead them to be more flexible to market changes. On the other hand, strategic planning is also limited and it accrues only in some specific situations. All these factors can cause problems in BSC implementation. It means that, adaptability to external environment and limited strategic planning is not compatible with the nature of BSC. As it was the cause of BSC failure in Rompho (2011) study.

This study is conducted to uncover the root of problem in BSC implementation among SMEs regarding their main characteristics, including business strategy, uncertain market environment, and scarcity of resources specifically financial resources. Hence, this study seeks to find the best way in which SMEs could have a better performance from using BSC as part of management control system to implement their strategy. Generally, SMEs' strategy is going to be affected by internal environment based on resource-based view of the firm. On the other hand, the contingency theory suggested that firms' performance is more effective if management control systems are matched with contextual variables (Jusoh, 2008). Therefore, it is necessary to evaluate the role of organizational environment (internal) on SMEs' business strategy since strategy is the basis of the BSC and also to investigate the influence of contextual variables (environmental uncertainty and business strategy) on BSC implementation. Knowing these relationships will clarify the effectiveness of BSC implementation, which helps SMEs to improve their performance.

### **1.3 Research Questions**

The context of this study is to explore the issues involved in BSC implementation among SMEs regarding the strategies adopted by their firms and their uncertain market environment and their consequences on performance, which needs to be clarified. Additionally, the effect of internal environment (financial resources) on Malaysian SMEs' business strategy is further evaluated. Therefore, the main research question of this study is: Do the internal and external environment of Malaysian SMEs influence the effect of business strategy and BSC implementation on performance?

Therefore, six research questions developed for this study are as follows:

1. Do financial resources, as components of internal environment, affect business strategy of Malaysian SMEs?
2. Does business strategy influence Malaysian SME's performance?
3. Does BSC influence Malaysian SME's performance?
4. Does Malaysian SME's business strategy influence their BSC implementation?
5. Does BSC mediate the relationship between business strategy and Malaysian SME's performance?
6. Does environmental uncertainty moderate the relationship between business strategy and BSC implementation?

### **1.4 Aim of the Study**

The context of this study is to explore the effect of financial resources on business strategy of SMEs. It also seeks to identify issues involved in BSC implementation among Malaysian SMEs regarding their adopted strategy and

environmental uncertainty and their consequences on performance which needs to be clarified.

In an attempt to contribute to this theoretical and practical need, this study developed a model based on resource-based view and contingency theory which was analysed within Malaysian SMEs' environment. Thus, the aim of this study is to contribute to increasing the level of clarity and precision in relationships among business strategy, BSC as a system of strategy implementation, contextual variables and performance.

### **1.5 Objectives of the Study**

Based on the statement of problem and aims of this study, the objectives can be defined as follows:

1. To examine the effect of financial resources as components of internal environment on business strategy of SMEs;
2. To determine the effect of business strategy on SME's performance;
3. To examine the effect of BSC implementation on SME's performance;
4. To determine the effect of business strategy on BSC implementation;
5. To investigate whether BSC implementation mediates the relationship between business strategy and performance; and
6. To investigate whether environmental uncertainty moderates the relationship between business strategy and BSC implementation.

## **1.6 Scope of the Study**

This study focused on the BSC implementation based on SMEs' business strategy and environmental uncertainty (customer and technology uncertainty) and the effect of them on Malaysian SMEs' performance. Furthermore, the effect of financial resources as important components of internal environment on business strategy of SMEs was also investigated. The population for this study was Malaysian SMEs in both manufacturing and service sectors operating in different states (e.g., Johor Bahru, Penang, Malacca, etc.). However only those Malaysian SMEs which implemented BSC in their business unit were asked to participate in the survey. A set of questionnaires were distributed among 300 owner/manager of SMEs. The owner/managers were targeted in this study because they were involved in the overall running of the businesses. Therefore, they were supposed to have knowledge about strategy and BSC implementation challenges. Their views were considered to represent the views of the entire firm.

## **1.7 Significance of the Study**

The SME sector plays a very important role in today's economy. In Malaysian economy, SMEs are also very important and play a significant role in its development (Omar *et al.*, 2009). SMEs are considered to be the backbone of industrial development in the country (Saleh and Ndubisi, 2006). The future progress of Malaysia seems to depend greatly upon development of SMEs and they are vital for accomplishing vision 2020, which aims at being fully developed and becoming an industrialized nation by the year 2020 (OECD, 2014). In the year 2020, Malaysia will develop to become an industrial nation by capitalizing on the country's strengths and by overcoming weaknesses through the SMEs (Omar *et al.*, 2009). Therefore, this signifies that SMEs play a great role in business economy. Though the SMEs' role is pivotal, they have not been considered comprehensively in research area, especially regarding the use of BSC.

In relation to the above, this study attempted to expand the body of knowledge regarding the use of BSC among SMEs in Malaysia. Since there were few studies conducted by previous scholars, it is therefore important to study the BSC implementation in Malaysian SMEs specifically regarding the nature of their business strategy and the market which are limited and dynamic respectively. Among available studies, there is only one study (Rompho, 2011) which examined the cause of BSC failure according to Thai SMEs' strategic planning, and there is no study analysing the mediating role of BSC and moderating effect of environmental uncertainty on the relationship between strategy and BSC.

Since Malaysian SMEs should improve their performance and productivity in order to grow beyond the middle-income trap by 2020 (OECD, 2014), they need to have a fresh approach to meet that target. As discussed before, BSC can help companies to implement strategy more effectively. It means that strategic targets and firm's objectives can be more focused through BSC implementation which could consequently improve performance. However, its usage is not a blueprint for success. Companies can achieve a better performance if there could have a good fit between the elements of their external environment, the firm's strategy, and their choice of control system (Govindarajan and Gupta, 1985). Therefore, evaluating the causal relationship between Malaysian SMEs' environment, business strategy, BSC implementation and performance is significant since it elaborates how SMEs can have a better BSC implementation according to their business strategy and market environment, which can consequently affect their performance. Therefore, this study has filled the gap in knowledge by clarifying the effect of strategy and environmental uncertainty on BSC and its relationship with Malaysian SMEs' performance.

The results of this study are valuable for Malaysian SME leaders who are using or about to use the BSC, by helping them to recognise potential limitations before investing more time and effort. The results are considered useful for Malaysian SMEs since they have been asked to significantly improve their performance. The findings of this study will also guide future researchers to focus on strategy implementation aspect of using BSC in SMEs in Malaysia and other



developing nations. Since literature review shows that BSC can be applied in SMEs' environment, but it is not implemented effectively, the result of this study can help researchers to design BSC which could be adjusted with SMEs' nature of strategy and external environment in order to enhance the level of its usage.

## **1.8 Operational Definition**

In this section the definition of key terms are explained. This study mainly involves different concepts such as business strategy, organizational environment, and BSC as strategy implementation system which were evaluated among SMEs.

### **1.8.1 Strategy**

Strategy is defined as a pattern in a stream of decisions. Porter (1996) defined strategy as the creation of a unique and valuable position, involving a different set of activities.

### **1.8.2 Strategy Implementation**

Strategy implementation is defined as the managerial exercise of putting a freshly chosen strategy in place. It involves the managerial exercise of supervising the ongoing pursuit of strategy, making it work, improving the competence with which it is executed, and showing measurable progress in achieving the targeted results (Thomson and Strickland, 2003).

### **1.8.3 Balanced Scorecard (BSC)**

The BSC was first introduced by Kaplan and Norton (1992). This model overcomes ambiguities and deficiencies of previous management approaches. It helps companies to recognise the measures which should be considered more precisely. Vision and strategy could be translated using this approach. The BSC

defines the strategic relations to incorporating performance across an organisation, communicates corporate objectives and measures to a business unit, and helps to align strategic initiatives. BSC translates the firm's strategy into four perspectives (financial, customer, internal business processes, and learning and growth) which considers both financial and nonfinancial perspectives.

#### **1.8.4 Small and Medium-Size Enterprises (SMEs)**

SMEs are a diversified group. They can be found in different kinds of business activities (Rajesh and Vinayagamurthy, 2013). They are mainly recognised by three distinctive attributes including number of employees, paid-up capital, and annual revenues (Kureshi *et al.*, 2009). Malaysian SMEs are basically defined based on two features: Sales turnover and number of employees (SME Corporation Malaysia, 2012):

**Manufacturing:** Sales turnover not exceeding RM50 million OR full-time employees not exceeding 200 workers.

**Services and Other Sectors:** Sales turnover not exceeding RM20 million OR full-time employees not exceeding 75 workers.

#### **1.8.5 Environmental Uncertainty (EU)**

Situation where the management of a firm has little information about its external environment that is in a state of flux and, hence, largely unpredictable. Generally, it means the unpredictability in the actions of the environment such as customer, competitor, technology, etc. (Bourgeois, 1985).

### **1.8.6 Financial Resources**

For a business to be recognized, it must combine different kinds of resources such as human resources, financial resources, etc. The financial resource is the money required to pay employees, purchase required material, and generally keep the business operating (Pride *et al.*, 2012).

### **1.8.7 Performance**

Firm performance refers to the firm's success in the market, which may have different outcomes. Firm performance is a focal phenomenon in business studies. However, it is also a complex and multidimensional phenomenon. Performance can be characterized as the firm's ability to create acceptable outcomes and actions (Pfeffer and Salancik, 2003). Strategically, firm performance is often referred to as firm success or failure (Ostgaard and Birley, 1995).

## **1.9 Structure of the Thesis**

This study comprises five chapters. The first chapter introduces the thesis and explains background of the study, problem statement, research questions, aim of the study, research objectives, significance of the study, and definition of key terms.

Chapter 2 provides a broad overview of the performance measurement system and highlights the emergence of BSC. The extensive literature review in Chapter 2, discusses, and summarizes previous studies regarding the use of BSC in SMEs. The literature review also provides insights into the relationships between business strategy, organizational environmental (internal and external), BSC, and performance. Finally the chapter ends with a discussion of the contingent variables and research framework that will be evaluated in this study

Chapter 3 describes the research methodology and design and the process of data collection to achieve the research objectives. Research population and sampling method is also discussed in this chapter. The chapter describes the constructs of questionnaire and finally it concludes with a discussion of the statistical methods that were used to analyse the data.

Chapter 4 explains empirical findings of the model tested. The chapter presents the results on the effect of financial resources on business strategy and discusses the contingent effect of business strategy and environmental uncertainty on BSC implementation. The findings regarding the performance effect of using BSC and business strategy together with the mediating role of BSC and moderating role of environmental uncertainty are also explained in this chapter.

Finally, Chapter 5 discusses the results, whereby it outlines the contributions that this research makes to the study of BSC implementation in Malaysian SMEs. Thereafter, it deliberates some limitations to the study and makes some suggestion for future study.

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