MALAYSIAN SME PERFORMANCE AND THE GOVERNMENT BUSINESS SUPPORT SERVICES: THE MODERATING EFFECTS OF ABSORPTIVE CAPACITY

By

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ABSTRACT

This study examined the relationship between the Government Business Support Services (GBSS) (relating to financial support and non-financial support) and the performance of Small and Medium Enterprises (SMEs) in Malaysia. Due to the recognition of the importance of SMEs to the economy, numerous government programmes have been and are being implemented over the years, all of which are aimed at the development of SMEs and enhancing their performance. However, the effect of globalisation has attracted big players to operate their businesses in Malaysia. Thus coupled with the government's open-door policy, this has caused a relatively greater competitive and dynamic business environment for all SMEs, which makes it even more challenging for these SMEs to prosper. This research also examined absorptive capacity (AC) as a moderator variable influencing the relationship between GBSS and SME performance. AC influences the knowledge that can be assimilated and how it is used, determining which strategic actions need to be implemented, and in this study, it refers to the acquisition and assimilation of knowledge. A self-administered questionnaire was used to collect data from 150 SME firms in the northern states of West Peninsular Malaysia in April and May 2013, and the gathered data was analysed by using SPSS 19.0. Statistically, the results confirmed that GBSS is positively related to SME performance and there is an interaction of AC as a moderator on GBSS and SME performance. The outcome of this study provides new knowledge and important insights for government agencies, such as SME Corp., to look further at the programmes and guidelines, and enforce new policies toward improving the performance of SMEs in Malaysia. Finally, in order to evaluate SME performance, it is more relevant to explore the types of assistance provided by the government. Further research can provide deeper explanations by considering either financial or non-financial only factors as variables that determine SME performance.

Keywords: Government Business Support Service, Small and Medium Enterprise Performance, Absorptive Capacity

ABSTRAK

Kajian ini memeriksa hubungan antara Perkhidmatan Sokongan Perniagaan Kerajaan (PSPK) (berkaitan dengan bantuan kewangan dan bantuan bukan kewangan) dan prestasi Perusahaan Kecil dan Sederhana (PKS) di Malaysia. Oleh kerana pengiktirafan kepada kepentingan PKS terhadap ekonomi, kerajaan telah dan sedang melaksanakan pelbagai program yang kesemuanya bertujuan untuk pembangunan dan meningkatkan prestasi PKS. Walau bagaimanapun, kesan globalisasi telah menarik ahli perniagaan yang besar untuk menjalankan perniagaan mereka di Malaysia. Tambahan pula dengan dasar buka pintu kerajaan telah menyebabkan persekitaran perniagaan menjadi lebih berdaya saing dan dinamik untuk semua PKS yang menjadikan ia lebih mencabar untuk PKS ini berjaya. Kajian ini juga telah melihat kapasiti penyerapan (KM) sebagai pembolehubah moderator yang mempengaruhi hubungan antara PSPK dan prestasi PKS. KM mempengaruhi pengetahuan yang boleh diasimilasikan dan bagaimana ia digunakan, menentukan tindakan strategik yang perlu dilaksanakan dan dalam kajian ini, ia merujuk kepada perolehan dan penyerapan ilmu. Borang soal selidik yang ditadbir sendiri telah digunakan untuk mengumpul data daripada 150 firma PKS di negeri-negeri Utara Semenanjung Malaysia pada bulan April dan Mei 2013. Kemudian, data ini telah dikumpulkan dan dianalisis dengan menggunakan perisian SPSS 19.0. Mengikut statistik, dapatan kajian mengesahkan bahawa PSPK mempunyai hubungan yang positif dengan prestasi PKS dan terdapat interaksi KM sebagai moderator ke atas hubungan PSPK dan prestasi PKS. Hasil daripada kajian ini memberikan pengetahuan baharu dan penting kepada agensi-agensi kerajaan seperti SME Corp untuk melihat program dan garis panduan dan menguatkuasakan dasar-dasar baharu ke arah meningkatkan prestasi PKS di Malaysia. Akhir sekali, untuk menilai prestasi PKS, ia lebih relevan untuk meneroka jenis bantuan yang disediakan oleh kerajaan. Penyelidikan lebih lanjut dapat memberikan penjelasan yang lebih mendalam dengan mempertimbangkan sama ada hanya faktor-faktor kewangan atau bukan kewangan sahaja sebagai pembolehubah yang menentukan prestasi PKS.

Kata kunci: Program Bantuan dan Perkhidmatan Kerajaan, Prestasi Perusahaan Kecil dan Sederhana, Keupayaan Menyerap

DEDICATION

Father / Abah

All your teachings, advice, and spirit live on in my heart
Segala didikan, pesanan, dan semangatmu sentiasa hidup di dalam jantungku

Mother / Emak

Your love and sacrifice, deeply engraved in my heart
Kasih sayang dan pengorbananmu, ku sematkan di hatiku

My Husband / Suamiku

Your patience and support, key to my success
Kesabaran dan sokonganmu, kunci kejayaanku

Amirrul, Amin, Aiiman

Your success and greatness, become my inspiration
Kejayaan dan kehebatan kalian menjadi inspirasiku

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ABBREVIATIONS

AC	Absorptive Capacity
CED	Committee for Economic Development
CGC	Credit Guarantee Corporation
FDI	Foreign Direct Investment
FS	Financial Support
GBSS	Government Business Support Services
GDP	Gross Domestic Products
GVC	Global Value Chain
HACCP	Hazard Analysis Critical Control Point
IMP2	Second Industrial Master Plan
IMP3	Third Industrial Master Plan
KEDA	Kedah Regional Development Authority
MARA	Majlis Amanah Rakyat
MECD	Ministry of Entrepreneur and Cooperative Development
MIDA	Malaysian Industrial Development Authority
MNCs	Multi-National Corporations
NCER	Northern Corridor Economic Region
NEM	New Economic Model
NFS	Non-Financial Support by the Government
NSDC	National SME Development Council
P	SME performance
PACAP	Potential Absorptive Capacity
PERDA	Penang Development Authority
RACAP	Realised Absorptive Capacity
RBV	Resource-Based View
R&D	Research and Development
SMEs	Small and Medium-Sized Enterprises
SMIDP	Small and Medium Industry Development Plan
UN	United Nation
OEDC	The Organisation of Economic Corporation and Development

OM	Owner Manager
10MP	Tenth Malaysia Plan

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

The contributions of Small and Medium Enterprises (SMEs) to the national economy have been acknowledged (Tahir, Mohamad, & Hasan, 2011) throughout the world. SMEs can be found in every sector of the economy as the main drivers for a contemporary economy (Thassanabanjong, Miller, & Marchant, 2009), which bring along development and growth (Grilo & Thurik, 2006). The development of the SME sector is widely seen as a key element of a nation's successful economy (Man, 2009) and a major economic mover. This sector can also be considered a potent source of national, regional, and local economic growth (Taylor & Murphy, 2004; Ramdani, Lorenzo, & Kawalek, 2009).

Thus, the development of SMEs is correspondingly recognised as an integral component in achieving sustainable economic growth in Malaysia (Hashim, 2007a). SMEs have always retained prime position on the government's financial radar screen by virtue of their sizeable contribution to the nation's gross domestic product (GDP) (SME Annual Report, 2011), whilst providing job opportunities for over half the population's workforce, and acting as suppliers of goods and services to large organisations (Singh, Garg, & Deshmukh, 2008). SMEs have been identified as the engines of growth (Baharun, Abdul Hamid, & Hashim 2003) to help this nation to become a developed and industrialised nation by the year 2020 (Abdul Hamid, 1993). In 2009, the majority of total business establishments in Malaysia were SMEs with 99.2%, which also

contributed to the country's economy in terms of employment, GDP, and export figures (MITI, 2009). This is consistent with the "Vision 2020" of the country that recognised the importance of performing industrialisation rapidly towards capitalising on the country's strengths and forcefully tackling the weaknesses (Baharun *et al.*, 2003).

SMEs play a significant role particularly in the manufacturing sectors (Ramayah & Koay, 2002; Alam, Ali, & Jani, 2011). In the SME Annual Report (2011), there were 5.9% or 37,861 establishments categorised as SMEs in the manufacturing sectors that form dynamic drivers to the national economy, employment, and innovation. By 2011, SMEs remained resilient to record a relatively strong GDP growth of 6.8%, underpinned by domestic demand and supportive policies by the government (SME Annual Report, 2011). Manufacturing SMEs act as specialist suppliers of components, parts, and sub-assemblies to large companies (Singh *et al.*, 2008). However, lack of product quality supplied by SMEs could adversely affect the competitive ability of the larger organisations.

Currently, there are 645, 136 SMEs operating in Malaysia that represent 97.3% of total business entities (SME Annual Report, 2011). According to the Department of Statistics, Malaysia (2011), 90% of SMEs deal with services (580,356 SMEs), 5.9% with manufacturing (37,861 SMEs), 3% with construction (19, 283 SMEs), agriculture (3, 775 SMEs), and lastly 57 SMEs in mining and quarrying. In addition, the majority of SMEs are micro-enterprises (77% or 496,458 SMEs) followed by small enterprises (20% or 128,787 SMEs), and medium sized enterprises (3% or 19,891 SMEs).

Considering the significant role of SMEs to the nation's economic development, the government has provided a number of business support programmes to ensure their sustainable competitiveness (Yusoff & Yaacob, 2010). Therefore, the Malaysian government has launched several initiatives to facilitate and promote expansion of the SMEs (SME Annual Report, 2011). These initiatives aimed to create the institutional and systematic conditions to support upgrading of firm level capabilities, diversification, and creation of new firms (Yusoff & Yaacob, 2010). This is a sign on how the Malaysian government deals with managing some development for the SMEs in Malaysia to mature in their own field as well as benchmark themselves with the best in industry.

Historically starting a few years before the Malaysia's Independence Day (31 August 1957), the government continuously put an effort into supporting their activities while considering the significant role of SMEs to the nation (Yusoff & Yaacob, 2010). In the past, SME policies were based on the Third Industrial Master Plan and the Ninth Malaysia Plan. The introduction of new policies by the government, namely the New Economic Model (NEM) and Tenth Malaysia Plan (10MP) required some re-alignment and adjustment of SME development policies and initiatives in order to achieve a nation with high income and developed status by 2020 (SME Annual Report, 2009). Recently, to assist SMEs in Malaysia, the Prime Minister, Datuk Seri Najib Tun Razak announced an allocation of RM 1 billion in the 2013 budget to help Malaysian SMEs (New Straits Times, 2012), while RM 500 million was established specifically for 2012 to enable SMEs to commercialise research products through the Commercialisation Innovation Fund (The Star Online, 2011).

However, up to this recent year, the usage of the business assistance services provided by the government can be considered poor, especially among micro-sized SMEs (Yusoff, 2011). In order to boost the economic growth and enhance rapid development toward achieving the National Economic Policy and Vision 2020 goals, an attractive business environment should be of concern and focus in order to increase opportunities in the enhancement of SME performance.

As with most issues in Government Business Support Services (GBSS), the effectiveness of GBSS as a policy tool to improve the performance of SMEs is still open to question, even though GBSS has become conventional wisdom in many countries across the globe. GBSS can be classed as an approach used by the government to assist, to improve, to promote, and to provide training to SMEs in hoping for SMEs progress and development according to the government agendas regarding SMEs. In has been argued that GBSS has a positive impact on the development of SMEs to overcome SME limitations in order to ensure and gradually enhance company competitiveness locally and eventually making them ready to go for the international market. GBSS can be broadly divided into two categories, namely financial and non-financial support services, which is the focus of this research. SMEs need government intervention (Yusoff *et al.*, 2010) to equip SMEs with the characteristics of being innovative, creative, and flexible. Thus, small business development is now a key aspect of economic development strategy.

However, no matter how much assistance the government provides, certain characteristics of the SMEs may have an influence on the relevancy, efficiency, and

effectiveness of GBSS. One such characteristic is absorptive capacity, which has been widely studied by organisational and innovation researchers, focusing on the identification of the determinants of absorptive capacity for different types of knowledge (Lane *et al.*, 2006). Absorptive capacity can be viewed as a firm's ability to identify, assimilate, and exploit external knowledge to commercial ends (Cohen & Levinthal, 1990). Thus, absorptive capacity is high if companies can learn how to make use of new knowledge within their processes and implement a change that increases their competitiveness. Ucbasaran, Lockett, Wright, and Westhead (2003) indicated that absorptive capacity has two major functions, namely (1) wealth creation, and (2) protection of shareholders' interests. Absorptive capacity enables the firm to make sense of external knowledge, interpret it, combine it with existing knowledge, and successfully exploit it commercially. This capacity facilitates exploration activities that enhance the firm's innovativeness that leads to value creation.

Researching these issues has potential to be a rich area for new discovery of knowledge. Thus, this dissertation offers several new contributions to the relationship between GBSS and SME performance. This study has investigated an issue faced by SMEs regarding their performance in relation to the support services received from the government. In order to address this issue, this researcher had sought to identify the most influential services provided by the government either relating to financial or non-financial support. Although GBSS had been explored in previous studies (Yusoff & Yaacob, 2010), however in the Malaysian context, there are limited studies that have examined on how GBSS influences SME performance. Furthermore, there are even less study efforts in investigating absorptive capacity within this relationship. Therefore, this

study has attempted to fill a gap by examining the relationship between GBSS and SME performance in Malaysia, which taking into consideration absorptive capacity.

1.2 Problem Statement

There is no denying that SMEs play a major role in a nation's economy by serving as link between various subsectors and also a source of dynamism and agility (Ramlan & Abd Malek, 2011). Their continual survival is being threatened with the effect of globalisation that has attracted big players to operate their businesses in Malaysia over the years. This open door policy has led to a more competitive and dynamic business environment for the SMEs, since they will become highly vulnerable due to their inability to compete effectively and thus affected by the operation of multi-national companies (MNC) in their locality. Without interference from external parties to support SME businesses, the risk of failure among SMEs would be considerably high (Yusoff, 2011).

Therefore in recognition of this, many governments throughout the world have intervened in order to assist SMEs to effectively compete in the open market. Over the years, the Malaysian government has provided numerous business assistance services via various agencies (Yusoff, 2011), in the form of two types of initiatives, namely (1) financial and (2) non-financial support services (Ahmad & Abd Latif, 2012).

In relation to the financial aspect, Business Times (2011) reported that Chua Tiam Wee (SMI Association of Malaysia President) claimed that among the challenges faced by SMEs in Malaysia in 2010, lack of funds continues to be the largest hurdle of all.

Branding among SMEs is another area which the sector still lacks and needs attention. Lack of trading facility for SMEs is also another area of potential research. Although the move by the government in the 2012 budget to improve the GBSS by introducing new funds for the SMEs is considered supportive, the SMEs believed that there is still room for improvement.

However, utilisation of these Government Business Support Services (GBSS) can be considered poor among SMEs, where one reason is that SMEs are unaware of the existence of such services (Yusoff, 2011; Hashim, 2007b). Even though the government offers a systematic approach to financing SMEs, a case study in Malaysia showed that only 10% of SMEs were aware about the services provided by the government (Hashim & Abdullah, 2002). Additionally, Boocock and Mohd Shariff (1996) highlighted the poor awareness, and that there is a general lack of knowledge among SMEs about the funding opportunities available (Boocock & Wahab, 2001), while Yusoff, Yaacob, and Ibrahim (2010) indicated that most respondents in their study did not know about the existence of GBSS.

In addition, the failure to disseminate information about the government support services is one of the contributing factors toward this problem (Yusoff & Yaacob, 2010). Micro-sized SMEs relied more on friends as source of information pertaining to GBSS (Yusoff, 2011) that sometimes is not accurate and comprehensive, as they could not obtain information from first-hand sources (Yusoff, 2011; Yusoff & Yaacob, 2010). Therefore, many of these GBSS programmes are not fully understood and not utilised.

Meanwhile, from the non-financial GBSS perspective, Saleh and Ndubisi (2006) reported the finding from APEC (1994), where there were problems faced by local SMEs related to business advisory services of GBSS. Some of these problems include, (1) lack of coordination among services providers, (2) low usage rate of the GBSS, (3) low level of awareness on GBSS, and (4) bureaucracy of government agencies. The level of utilising GBSS is not at optimum level, despite its existence over the last four decades (Hashim *et al.*, 2007).

Besides, there is a tremendous pressure to sustain competitiveness in the domestic, as well as global market. SMEs have to face global competition, technological advances, changing needs of customers, and also competitive paradigms (Singh *et al.*, 2008). This has forced firms to compete simultaneously along different dimensions, such as design and development of the product, manufacturing, distribution, communicating, and marketing (Singh *et al.*, 2008), all of which non-financial GBSS can potentially assist in enhancing performance for the SME. Therefore, without proper planning or additional assistance by the government through GBSS, SMEs may struggle to perform well in the industry.

In addition, even though the funding provided through GBSS is relatively small, it shows that the government understands the external factors, such as short-term economic slowdown or rising cost of commodity prices, may affect the SMEs. When SMEs participate in trade missions—another form GBSS—matched foreign companies usually do not meet the criteria and market needs. This could hinder SME growth and their effort to penetrate new markets abroad. The government should first conduct a

study or obtain views from companies in the trade delegation on the criteria for potential business partners in order to avoid mismatch and most importantly, wasting of time and resources (Business Times, 2011).

Over the last decade, GBSS had been closely tied with government agencies to improve and develop SMEs in Malaysia. More research needs to be conducted to examine the specific and detailed impact of the government's policy programmes, especially GBSS, which include direct fund support, human resources, and technological support (Park & Kim, 2010). Also, there is a need for more in-depth studies and analysis focusing on a specific area with regard to growth, more specifically SME performance (Alam *et al.*, 2011), which is part of the motivation for this current research.

Moreover, one important area for SMEs that has little attention is how SMEs manage knowledge to create competitive advantage (Denan, 2008), which brings this discussion to the concept of absorptive capacity. In order to enhance the SME performance (Dyer & Singh, 1998; Wang & Han, 2011), SMEs need to critically look into the firm's innovation process (Cohen & Levinthal, 1990) and maximise the firm's absorptive capacity. Absorptive capacity is a knowledge base (Wang & Han, 2011) that firms need to focus on, which includes capability, knowledge content, organisational routines, and processes (Zahra & George, 2002a). Firms with greater absorptive capacity would benefit more from using tacit, ambiguous, and complex external knowledge (Escribano, Fosfuri, & Tribo, 2009; Wang & Han, 2011).

From the theoretical point of view, there are numerous studies relating to the government business support services (GBSS) and SME performance (Yusoff & Yaacob, 2010; Berry, Sweating, & Gotu, 2006; Chaston & Baker, 1998; Jianzhong & Hong, 2009; Mole, Hart, Roper, & Saal, 2009; Schaper & Vollery, 2004; Ramlan & Abd. Malek, 2011; Wang, 2003; SMIDEC, 2006; Mohd Asri, 1997; Hashim, Ahmad, & Zakaria, 2007). Still, there is lack of literature pertaining to GBSS in developing countries (Yusoff & Yaacob, 2010), especially Malaysia. Thus this is another motivation for the implementation of this current research effort, which is to contribute empirical evidence from the Malaysian perspective.

Based on these issues mentioned above, there are a lot of improvement initiatives that need to be considered by the government in ensuring the success of the GBSS provided to SMEs in Malaysia, especially relating to the effectiveness of GBSS as a policy tool to improve the performance of SMEs. Researching these issues has potential for revealing new understanding and knowledge. Therefore, this dissertation has attempted to examine how GBSS influences SME performance, or otherwise. Furthermore, this study examined whether there is a moderation effect by absorptive capacity on the relationship between GBSS and SME performance.

1.3 Research Questions

Research questions are used to ensure that a conducted study stays on track. After conducting an extensive literature review, the following research questions were established.

a) Is there a positive relationship between financial support provided by GBSS and SME performance?
b) Is there a positive relationship between non-financial support provided by GBSS and SME performance?
c) Is there any moderation effect of organisational absorptive capacity on the relationship between financial and non-financial support provided by GBSS and SME performance?

1.4 Research Objectives

Three research objectives motivated this research and the main aim of this research was to examine the relationship between GBSS and SME performance. The study also included an investigation into the moderation effects of absorptive capacity on the relationship between GBSS and SME performance. The research objectives that motivate this study are as listed below:

a) To examine the positive relationship between financial support provided by GBSS and SME performance.
b) To examine the positive relationship between non-financial support provided by GBSS and SME performance.
c) To examine the moderation effect of organisational absorptive capacity on the relationship between financial and non-financial support provided by GBSS and SME performance.

1.5 Significance of Study

The significance of this study can be divided into two aspects – theoretical and practical contribution.

1.5.1 Theoretical Contribution

This study looked into SME performance in the context of manufacturing SMEs in the Northern States of West Peninsular Malaysia. In addition, the present study intended to fill the gap in the body of literature concerning the impact of GBSS on SME performance. Studies on the Malaysian SME context formerly focused on utilisation and awareness of GBSS (Yusoff & Yaacob, 2010), but so far, the influence of GBSS on firm performance has not been studied. For that reason, the contribution of this present study is the investigation into the linkage between GBSS and performance of SMEs. Therefore, the results and recommendations stemming from this research would potentially provide some viable ideas on how competitive firms may consider the best or most appropriate solution to enhance their company performance, and thus maximising the GBSS provided by the government.

Moreover, this particular study also looked into and highlighted the importance of absorptive capacity as a moderating variable on the relationship between GBSS and SME performance. Prior research generally suggested that there is a relationship between absorptive capacity and firm performance (Wales, Parida, & Patel, 2012; Zahra & George, 2002b; Tsai, 2001; Cohen & Levinthal, 1990), but they do not include absorptive capacity as a moderating effect between GBSS and SME performance. However, it is essential for the company to continuously strive for developing

knowledge bases for sustainability and competitiveness of the company, as highlighted by Wales *et al.* (2012), and Griffiths-Hemans and Grover (2006). Therefore, this particular study has hoped to contribute to the existing literature on the importance of absorptive capacity, where it may either support or otherwise, the relationship between GBSS and thus potentially increase SME performance.

Although, the secret of firm performance has long fascinated many researchers, most studies focused on large companies while neglecting small companies (Sorooshian, Norzima, Yusif, & Rosnah, 2011). Therefore, there is a need for an increase in studies on SME performance in order to improve their competitiveness. By presenting the relationship between GBSS and SME performance, it would increase efficiency and avoid unnecessary waste of scarce resources by the government.

1.5.2 Practical Contribution

The findings may benefit not only practitioners in manufacturing SMEs but also policy maker such as the government, its agencies or the private sector, and last but not least, higher learning institutions for future research. The results of this study will provide ideas and practical suggestions which can be implemented to improve SME performance, especially in Malaysia.

1.6 Definitions of Key Terms

The definitions of variables used in the study are as follows:

1.6.1 SMEs

Previously in Malaysia, there was no standard definition as to what Small and Medium Enterprises (SMEs) were. Various agencies and banking institutions defined SMEs according to their own standards (although there is a significant degree of overlap in criteria). In this dissertation, after the classification of SME definition was developed by the National SME Development Council (NSDC), a manufacturing SME is defined as an establishment having full-time employees not exceeding 150 for manufacturing and manufacturing-related services (SME Corporation, 2011).

1.6.2 Government Business Support Service (GBSS)

The government business support services (GBSS) is a business advisory that provides one or more skill and knowledge in a related business operation field (Schaper & Vollery, 2004). In this dissertation, GBSS refers to financial support and non-financial support provided by the government that may affect SME performance.

1.6.3 SME Performance

Performance is a critical factor for effective management (Salaheldin, 2009) to which an operation fulfils the performance and meet the needs of the customers (Slack, Chambers, & Johnston, 2001). In this current research, perceptions of the SME owner or manager will be based on the subjective performance of SMEs, focusing on financial, productivity, customer related, and market share performance.

1.6.4 Organisational Absorptive Capacity

Absorptive capacity influences what knowledge can be assimilated and how it is used, determining which strategic actions are feasible (Lane, Koka, & Pathak, 2006). Therefore, in this study, absorptive capacity refers to the acquisition and assimilation of knowledge.

1.7 Scope of the Study

This study focused only on SMEs in the Northern States of West Peninsular Malaysia that has received assistance from agencies which offer a comprehensive support service, specifically in Malaysia, such as SME Corp. According to the SME Annual Report 2009/2010, there are 15 ministries and 60 agencies involved in SME development across all economic sectors in Malaysia. However, SME Corp. is the only specialised agency since 1996 that spurred the development of SMEs by providing infrastructure facilities, financial assistance, advisory services, market access, and other support programmes. Furthermore, the contributions of SME Corp. have been well recognised and have great positive impact on SME growth. The model was specifically developed for owner-manager (OM) and manager, solely in the manufacturing sector as the main respondent, because they could provide important information based on the basic philosophy of the business.

Moreover, according to data issued by the Malaysian Industrial Development Authority (MIDA), the industrial sector was without doubt the engine of growth for the Malaysian economy, with the FDI continuing to grow every year. Transformation of Malaysia from agriculture to industrialisation in the era of the Former Prime Minister, Tun Mahathir

Mohamed, eventually expanded manufacturing industries in Malaysia to grow very rapidly when compared to previous decades (SME Annual Report, 2011). The strong performance of SMEs in the manufacturing sector was underpinned by robust growth of consumer and primary related cluster industries. Therefore, it would be practically to focus on the manufacturing sector of Malaysian SMEs.

1.8 Organisation of the Dissertation

There are five chapters that have been identified in this dissertation. Chapter 1 presents overall information related to this research. It discusses the background of the study and research problem that has been explored through the research questions and objectives. The significance of the study, key definitions, and also scope of the study has been elaborated as well. In Chapter 2, the theoretical aspects of Government Business Support Services (GBSS), SME performance in Malaysia and also, absorptive capacity will be looked into through an in depth discussion. Here, the theoretical framework is developed and discussed.

Meanwhile, Chapter 3 elaborates the methodology and research design of the study together with the developed hypotheses, research design, and survey instrument. Also, data collection and techniques used in the data analysis is discussed. In addition, Chapter 4 highlights all the results of the study, where the relationship of GBSS and SME performance with the moderation effects of absorptive capacity is presented. The constructs is validated through the research findings and factor assessment. The results consist of the final output from the Descriptive Statistics Analysis, Correlations Analysis, Standard Regression Analysis, and Hierarchical Regression Analysis.

Last but not least, Chapter 5 concludes this dissertation by summarising the findings, discussing the limitations, and outlining some recommendations for future research, as well as implications of the study.

1.9 Summary

In this chapter, a brief overview of the entire research provided a clear research design. The most important aim in this chapter was to discuss the research objective and research problem of the study. At the same time, the researcher explained the significance of the study and highlighted the scope of the study among SMEs in the Northern States of West Peninsular Malaysia.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter elaborates on the literature of previous research. The most crucial discussion in this chapter is demonstrating the framework of this research, which shows the relationship of independent variables and dependent variable. It shall highlight a conceptual overview as well as main key terms of SMEs in Section 2.2, SME performance in Section 2.3, Government Business Support Services (GBSS) in Section 2.4, and Organisational Absorptive Capacity in Section 2.5. In addition, this chapter will indicate the relationship between variables, namely the relationship between GBSS and SME performance (Section 2.6), the relationship between SME performance and Organisational Absorptive Capacity (Section 2.7), and lastly, the relationship between GBSS and Organisational Absorptive Capacity (Section 2.8). As a central resource of SME information in Malaysia, this chapter also shall describe the agency that is SME Corp. (Section 2.9). Then, the conceptual framework for the current investigation is built based from the Resource-Based View (RBV) Theory of the Firm explained in Section 2.10, and in conclusion, the summary of this chapter is presented in Section 2.11.

2.2 Small and Medium-Sized Enterprises (SMEs)

2.2.1 Overview of SME Definitions

Small businesses are the backbone of many economies across the globe (Mbonyane, 2006). Small business development is now a key aspect of economic development

strategy. However, the major challenge is to overcome the high failure rate among these small businesses (Kinunda-Rutashobya & Olomi, 1999; Buckley, 1998).

As shown in Table 2.1, SMEs constituted nearly 100 per cent of the total number of company establishments in both developed and developing economies which indirectly provided more than half of total employment opportunities in all other economies (Rosman & Rosli, 2012) and the labour force of each country, with the exception of Singapore, which is dominated by large multinational corporations (MNCs).

Table 2.1
SME Statistic Worldwide – Establishment, Employment, and GDP

Country	% of establishment	% of employment	% of GDP
Malaysia	99.2	56.4	32.0
Japan	99.7	71.0	55.3
Taiwan	98.0	76.9	40.0
Thailand	99.6	69.0	38.9
Singapore	90.0	45.0	25.0
Germany	99.7	79.0	49.0
Indonesia	99.7	99.6	57.0
China	99.0	75.0	56.0
Philippines	99.6	70.0	32.0

Source: Adapted from Rosman and Rosli (2012)

In international business, most researchers and practitioners define SMEs based on the socio-economic development of each particular country environment as well as their purpose of the given definition. Commonly, SMEs are defined based on the number of employees (part-time and/or full-time employees), revenue earned, organisational assets, and sector of industry. For example, in Taiwan, for a company to be considered an SME it would need to employ 650 employees or less (Chelliah, Sulaiman, & Yusoff, 2010; Lin & Chaney, 2007); the United States of America, Canada, China, and Italy defined

SMEs as employing 500 employees or less (Chelliah *et al.*, 2010; Cavusgil, Knight, & Riesenberger, 2008), and Brunei, Norway, and Hong Kong categorised SMEs if the company has less than 100 employees. Table 2.2 displays the SME definition for other countries.

Table 2.2
Definitions of SMEs in Selected Countries

Country	Number of Employees	Asset/capital (millions)	Sales Turnover (million)
Australia	< 200		
Brunei	< 100		
Canada	< 500		< CDN$20
Chile	< 200		< US$1.5
China	< 500		
Hong Kong	< 100		
Indonesia		< US$1	< US$5
Italy	< 500		
Mexico	< 250		
New Zealand	< 50		
Norway	< 100		
Philippines	< 200	< Peso60	
Singapore	< 200	< S$15	
Thailand	< 200	< Baht 100	
USA	< 500		< US$1,000
Vietnam	< 200	< D1 billion	
UK	< 200 (varies by sector)		
South Korea	< 300 (varies by sector)	< Won 500 (varies by sector)	
Papua New Guinea	< 200		
Peru			< US$17 (aver. for 3 years)

Source: Adapted from APEC (1998); Abdullah, Bakar, Sirat, Khalid, Rafie, and Nor (2002); and Saud(2005)

Table 2.3 shows the number of employees that can be used as a universal measure to compare different definitions according to number of employees.

Table 2.3
SME Statistic Worldwide – Number of Employees

Country	Number of Employees
Australia	< 200
Canada	< 500
European Commission	< 250
South Africa	< 200
United Kingdom	< 250

Source: Naude (2007)

Meanwhile, World Bank categorised a company as being an SME if they employed between 5 to 199 full time employees (United Nation, 1978). Conversely, the European Commission as reported by Mulhern (1995) and Smallbone (1995) defined SMEs as enterprises that employ less than 500 employees. In this case, enterprises were further categorised into the following three categories, namely:

1. micro-enterprises – employing less than 10 employees,
2. small enterprises – employing 10-99 employees, and
3. medium enterprises – employing 100-499 employees.

The Committee for Economic Development (CED) defined SMEs from a different perspective (Hashim & Abdullah, 2002; Gaedeke & Tootelian, 1991). According to CED, a SME should have at least two of the following characteristics:

1. management of the business is independent whereby managers are also the company's owners,
2. capital is supplied by an individual owner, family members or a small group,
3. the company is locally operated where the employers and owners reside in one home community although the markets do not necessarily consist of local customers, and

4. the size of the firm is relatively small as compared to other firms in the same industry.

Malaysian SMEs are a vital component of the country's economic development (Saleh & Ndubisi, 2006) particularly for the Malaysian perspective. There is no common definition of small and medium enterprises (SMEs) in Malaysia, as highlighted by Hashim (2002). Different agencies defined SMEs based on their own criteria, usually benchmarking against annual sales turnover, and number of full-time employees or shareholders' funds, this definition is mainly imposed on SMEs in the manufacturing sector (Hashim, 2002).

However, starting from 9 June 2005, the National SME Development Council (NSDC) has approved the common definition of SMEs across economic sectors, for adoption by all government ministries and agencies involved in SME development, as well as financial institutions (SME Annual Report, 2011; Saleh & Ndubisi, 2006). For wider coverage and applicability of this research, the definition of SMEs used was based on two criteria, namely (1) number of employees; or (2) annual sales turnover, and for the following sectors:

1. primary agriculture;
2. manufacturing (including agro-based);
3. manufacturing-related services (MRS); and
4. services (including information and communications technology).

Table 2.4 shows the list of approved SME definitions in Malaysia. However, it is not exhaustive and may be amended or expanded by the National SME Development Council from time to time, to reflect changes in operating and business conditions (SME Annual Report, 2011).

Meanwhile, in a recent development of the SME industry, the Malaysian government had announced a new definition to define the characteristics of SME companies. However, for the purpose of this study as well as keeping in line with the scope and time of this study, the definition provided by SME Corporation (2011) which was well accepted and used before this new definition.

Table 2.4
Definition of SMEs in Malaysia

	Category	Micro-enterprise	Small enterprise	Medium enterprise
1	Manufacturing, manufacturing-related services and agro based industries	Sales turnover of less than RM250,000 or fewer than five full time employees	Sales turnover between RM250,000 and RM10 million or between five and 50 full time employees	Sales turnover between RM10million and RM25 million or between 51 and 150 fulltime employees
2	Services, primary agriculture and information and communication technology (ICT)	Sales turnover of less than RM200,000 or fewer than five full time employees	Sales turnover between RM200,000 and RM1 million or between five and 19 full time employees	Sales turnover between RM1million and RM5 million or between 20 and 50 fulltime employees

Source: SME Corporation (2011)

2.2.2 SMEs in Malaysia

A census conducted in 2011 for reference year 2010 showed that 645, 136 SMEs were operating in Malaysia, representing 97.3 per cent of total companies established, as

compared to large established companies, numbering 17,803 or 2.7 per cent (SME Annual Report, 2011), as shown in Table 2.5.

Table 2.5
Key Indicator of SMEs

	SMEs	**Large**	**Total**
Number of Company Established	645, 136 (97.3%)	17,803 (2.7%)	662,939
Gross Output (RM Million)	507,089(28.5%)	1, 270, 228 (71.5%)	1,777,317
Value Added (RM Million)	213,921 (30.2%)	493,568 (69.8%)	707,489
Employment (Persons)	3,669, 259 (52.7%)	3, 294,714 (47.3%)	6,963,973

Source: Adopted from Economic Census (2011)

Among 645, 136 SMEs, the Malaysian SMEs are categorised into three sectors namely (1) services, constituting 580,356 established companies; (2) manufacturing with 37,861 SME firms; and (3) construction with 19,283 SMEs (Table 2.6).

Table 2.6
Distribution of SMEs by Sector in 2010

	Companies Established	**Total Employment**
Services	580,985	2,610,373
Manufacturing	37,861	698,713
Construction	19, 283	275,631
Agriculture	6,708	78,777
Mining and Quarrying	299	5,765

Source: Adapted from Economic Census (2011)

2.2.2.1 Manufacturing Sector in Malaysia

Generally, manufacturing can be defined as the production of good or items by using machines, equipment, and labour forces. Manufacturing is a strategic sector for

achieving the New Economic Policy (NEP) objectives, especially on development of new activities for employment opportunities among Malaysian labour force. One of the Malaysian government agencies that monitor the development of SMEs is the Malaysian Industrial Development Authority (MIDA), which reported that the manufacturing sector accounted for just over half of all foreign direct investment (FDI) in 2010 (Oxford Business Group, 2012). Even though the total number of manufacturing establishments in 2010 decreased as compared to 2003, this sector still generates high value of sales, as presented in Table 2.7.

Table 2.7
Statistics for Manufacturing Sector for 2003 and 2010

	2010	**2003**
Number of Companies Established	37,861	39,373
Value of Gross Output (RM Million)	194,032	154,743
Value Added (RM Million)	38,058	45,760

Source: Adapted from Economic Census (2011)

In Malaysia, the majority of manufacturing companies fall into the category of SME (Baharun *et al.*, 2003), whereby there are 37,861 (95.4%) establishments that have been categorised as SMEs in the manufacturing sector from a total of 39,669 establishments in Census 2010 (SME Corporation, 2011). More than half of total SMEs in the manufacturing sector comprised micro-sized enterprises, as shown in Table 2.8.

Table 2.8
Macro Indicator of SMEs in Manufacturing Sector in 2010

Variables	Total (RM)	SMEs	%	Micro	%	Small	%	Medium	%
Value of gross output (RM Million)	836,494	194,032	23.2	3,853	2.0	59,540	30.7	130,639	67.3
Value added (RM Million)	170,673	38,058	22.3	1,344	3.5	14,348	37.7	22,366	58.8
Employments (Persons)	1,812,360	698,713	38.6	67,892	9.7	360, 299	51.6	270,522	38.7

Source: Adopted from Economic Census (2011)

In addition, the majority of manufacturing companies were located in the west central parts of Peninsular Malaysia, in particular, the states of Selangor, Perak, Johor and Penang (Saleh & Ndubisi, 2006), in terms of value of gross output as shown in Table 2.9.

Table 2.9
SMEs in Manufacturing Sector by State in 2010

States	Number of establishments	Value of gross output (RM Million)	Value Added (RM Million)
Selangor	8,314	46,895	11,071
Johor	4,828	35,990	6,086
W.P (Kuala Lumpur, Putrajaya)	4, 201	11, 199	2,951
Perak	3,833	14,769	2,474
Kedah	2,809	7,424	1,554
Penang	2,614	16, 281	2,898
Sarawak	1,977	10,710	1,913
Kelantan	1,814	2, 146	419
Terengganu	1,782	4,647	1,967
Negeri Sembilan	1,495	9,356	1,337
Sabah	1,382	14,965	2,373
Pahang	1,305	13,360	1,774
Malacca	1, 107	5,691	1, 108
Perlis	291	355	70
W.P Labuan	109	245	63

Source: Adapted from Economic Census (2011)

However, the Malaysian northern states of Perak (northern part), Penang, Kedah, and Perlis also has the potential to be the forefront of manufacturing sector, especially related to modernised manufacturing as well as halal food zone (Northern Corridor, 2013). Through the Northern Corridor Economic Region (NCER) development programme, the government has accelerated economic growth and elevated income levels in those states towards maximising economic potential. In fact, the northern region has actually provided almost half of value-added income (RM5,946 Million) of that produced by Selangor (RM11,071 Million) in 2010 (SME Corporation, 2011).

2.2.3 SMEs: An Engine of Growth

Undeniably, the contribution of SMEs toward economic development and employment creation is significant for almost all nations throughout the whole world. In Japan, for example, there are about six million SMEs which contributed for 99 per cent of all businesses in the country and 60 per cent of the labour force (Dana, 1998). Meanwhile, in Europe, small businesses employed 60 per cent of the workforce (Wintermantel, 1999). In addition, research conducted by Lee (1998) indicated that SMEs in South Korea provides more than 70 per cent of all jobs in the country, while Taiwan, with 78 per cent of all jobs in the country (Lin, 1998). In Malaysia, SMEs accounted for 99.8 per cent of the total number of businesses and 76.7 per cent of total employment (OECD, 2004).

Thus, the Malaysian government's commitment to, and concern for, the development of SMEs has been clearly evident since the early 1970s. The New Economic Policy was introduced in 1971, which aimed to improve the people's welfare and restructure ethnic

economic imbalances (Saleh & Ndubisi, 2006). The government's commitment to the development of SMEs was continuously nurtured through the introduction of the Industrial Master Plan 2 (IMP2) that ended in 2005, followed by IMP3 (2005-2020) to coincide with the country's vision for 2020 (Saleh & Ndubisi, 2006; MITI, 2005).

As reported in the Annual SME Integrated Plan of Action 2009/2010, in 2009, a total of 157 key programmes were implemented amounting to RM2.68 billion which benefitted 732,000 SMEs. A total of 18 programmes were introduce toward strengthening the SME infrastructure (RM0.12 billion), 120 programmes were for capacity and capability building of SMEs (RM0.68 billion), and the remaining 19 programmes were for enhancing accessibility to financing (RM1.88 billion). The total number of programmes and amount of money invested shows the importance of SMEs, as well as, the seriousness of government initiatives to energise economic growth for Malaysia (SMIDEC, 2002).

2.2.4 SMEs: Futures and Challenges

SMEs in many countries face a myriad of challenges. At the theoretical level, studies identified some of the barriers to SME growth. Wang (2003) in particular highlighted many challenges faced by SMEs in a globalised environment, for example, lack of financing, low productivity, lack of managerial capabilities, poor access to management and technology, and heavy regulatory burdens, among others.

In this rapidly changing global economy, SMEs are increasingly observed as a force for national economic growth. The development of diverse and competitive SMEs is crucial

for creating economic resilience and contributing toward the nation's economy growth. The global economic crisis (from rough observation, almost every 7 to 10 years) supplemented by the incremental high cost of utilities, has posed considerable threats to the company's operations, especially SMEs (UNDP, 2007), as stated in UNCTAD report below:

> "Developing countries need to place the development of productive capacities at the heart of national policies. The firms continue to face a number of obstacles that inhibits growth and reduce their relationship with global value chains (GVCs) one of them is to increase the competitiveness of SMEs" (UNCTAD, 2006)

The Organisation of Economic Corporation and Development (OECD) which consist largely of developed nations also highlighted the issue faced by SMEs and their role in the global value chain. Among others, the challenges are their unawareness and misunderstanding of the value chain dynamics, identification of their competitive strength, inability to upgrade their daily operations and production, unable to protect in-house technology due to drastically technology development and changes, slow in their product innovativeness, and strict product quality compliance (OECD, 2004), such as International Standard Organisation (ISO), Malaysian Standard (SIRIM), halal standard (JAKIM), and Hazard Analysis Critical Control Point (HACCP) for foods products.

Malaysian SMEs face many other challenges that have been highlighted by Saleh and Ndubisi (2006), UPS (2005), Ting (2004), SMI development Plan 2001–2005 (SMIDEC, 2002), and APEC (1994).The study done by Saleh and Ndubisi (2006) identified a number of key challenges facing Malaysian SMEs, namely:

1. high levels of bureaucracy in government agencies hindering efficient business development,
2. difficulty in obtaining funds from financial institutions as well as from the government,
3. high levels of international competition due to globalisation; including competition from AFTA member countries, from MNCs or rapidly developing new competitors (e.g., enterprises from China and India), and
4. limited access to better technology and ICT.

A study by APEC (1994) showed that Malaysian SMEs faced the following challenges:

1. lack of comprehensive framework in terms of policies towards SMEs development,
2. agencies use inconsistent definitions to categories SMEs at the operational level,
3. too many agencies or channels for SMEs without effective coordination (this leads to lack of transparency to the target groups),
4. inadequate data and information on the development of Malaysian SMEs,
5. inability to be in the mainstream of industrial development,
6. difficulties in accessing loans and other forms of financial assistance,
7. many SMEs in Malaysia still occupy lands or sites that are not approved to be used for industrial purposes,
8. underutilisation of technical assistance, advisory services, and other incentives made available by the government and its agencies, and
9. lack of skilled and talented workers, which affects the quality of production as well as efficiency and productivity.

The Small and Medium Industry Development Plan (SMIDP) 2001-2005 study report (SMIDEC, 2002) suggested that Malaysian SMEs are facing many new challenges, domestically as well as globally. These challenges include:

1. intensified global competition,
2. competition from other producers (for example, China and India),
3. limited capability to meet the challenges of market liberalisation and globalisation,
4. limited capacity for technology management and knowledge acquisition,
5. low productivity and quality output,
6. shortage of skills for the new business environment,
7. limited access to finance and capital, and the infancy of venture funds in initial or mezzanine financing,
8. high cost of infrastructure, and
9. general lack of knowledge and information.

Inspired by all these challenges, on 29 April 2011, the National Small and Medium Enterprise Development Council (NSDC) on 29 April 2011 had approved the First Phase of the SME Master Plan (2011-2020). The Plan charted the policy direction of SMEs in all sectors towards achieving a high income nation by 2020 in line with the New Economic Model (NEM). The only vision is to create globally competitive SMEs that eventually enhance wealth creation and contribute to the social well-being of the nation. This vision of creating globally competitive SMEs is to be crystallised through the four main strategic goals, namely:

1. increase business formation to facilitate business dynamism through a constant stream of new entrants into the market;
2. intensify formalisation to incentives innovation, growth and promote fair competition;
3. raise productivity of SMEs to boost incomes and raise standards of living; and
4. expand number of high growth and innovative firms as they generate a substantial share of employment and output in the country as well as having the scale to be globally competitive.

Furthermore, the New Economic Model required some changes in the mind-set for SMEs to transform themselves to support the strategies for Malaysia to become a high-income and developed nation by 2020 (SME Annual Report, 2009), thus being at par with first world countries such as USA, Britain, Germany, and Japan. Amidst the globalisation and liberalisation of markets throughout the whole world, the report stressed on the importance of SMEs to drastically shift into a higher gear in order to transform their businesses to be more recognisable internationally and to remain relevant and important in the stiff, competitive world in order to eventually enjoy continued prosperity in a new domestic environment; also, not to forget, working for the betterment of SMEs in global business performance arena.

2.3 SME Performance

2.3.1 Overview

Performance is the life blood of organisations, since without it, no decisions can be made (Mosalakae, 2007).This has been the subject of extensive and increasing empirical

and conceptual investigation in the small business literature (Rodsutti & Swierczek, 2002; Watson, Newby, & Woodliff, 2000; Jarvis, Curran, Kitching, & Lightfoot, 2000; Lachman & Wolfe, 1997; March & Sutton, 1997; Murphy, Trailer, & Hill, 1996; Chandler & Hanks, 1993).

Performance evaluation theories and models begin with an understanding of how the firm can elevate and improve its efficiency and relate that analysis to the theory of the firm (Penrose, 1959) that is more than classical accountancy and the financial reporting format. Initially, performance evaluation thinking stems from strategic management theory in relation to competitiveness (Porter, 1991; Porter, 1980), organisation theory (Scott, 2003), and networking issues (Wincent, Anokin, & Boter, 2009; Wincent & Westerberg, 2005).

Meanwhile, firm performance refers to the level of success of the firm (Chelliah *et al.*, 2010). The ability of an organisation to survive and succeed has been influenced by various factors, some of which can and cannot be controlled (Man, 2009). Amaratunga and Baldry (2002), Venkatraman and Ramanujam (1987), and Kaplan and Norton (1992) advocated the idea of using multi-dimensional measures of performance.

2.3.2 Performance Differentiation

Performance can be assessed according to two dimensions, through (1) the non-financial method, and (2) profit efficiency using the stochastic efficiency frontier model (John, 2009). On the one hand with the non-financial method, it is clear that entrepreneurs achieve most of the objectives that have been identified earlier or during the process of

the company's establishment. On the other hand, financial performance measurement can be one of the biggest challenges faced by businesses in all sectors, especially with regard to their company's survival. The company's financial manager or management need to be well trained on how to manage company's financial progress efficiently and effectively, and be able to envisage measurable performance.

John (2009) found that performance can differentiate into two, which are displayed in Table 2.10.

Table 2.10
Two Categories of Performance

Financial performance	**Non-financial performance**
• Revenue growth over the last three years. • Net profits. • Profit to revenue ratio. • Return on assets	• Investments in R&D aimed at new innovations. • Capacity to develop a unique competitive profile. • New product/service development. • Market development; and Market orientation.

Moreover, scholars signify that financial performance generally looks at firms' financial ratios (derived from their financial statements) such as liquidity ratios, activity ratios, profitability ratios, and debt ratios. Whereas, non-financial performance measurement is more subjective and may look at customer service, employee satisfaction, perceived growth in market share, perceived change in cash flow, and sales growth (Haber & Reichel, 2005).

Thus, in order to practice performance management, the company's management attention should move from one measured aspect to another as the environment internal

and external to the organisation changes. Research by Hudson, Smart, and Bourne (2001) specified that there are six dimensions of performance six dimensions of performance that encourage a holistic approach when developing performance measures to support organisational strategy (Hudson *et al*., 2001), as shown in Table 2.11.

Table 2.11
Six Dimensions of Performance

Dimension	Items	Dimension	Items
1. Quality	• Product performance • Delivery reliability • Waste • Dependability • Innovation	**2. Time**	• Lead time • Delivery Reliability • Process throughput time • Process time • Productivity • Cycle time • Delivery speed • Labour efficiency • Resource utilisation
3. Finance	• Cash flow • Market share • Overhead • Cost reduction • Inventory performance • Cost control • Sales • Profitability • Efficiency • Product cost reduction	**4. Customer Satisfaction**	• Market share • Service • Image • Integration with customers • Competitiveness • Innovation • Delivery reliability
5. Flexibility	• Manufacturing effectiveness • Resource utilisation • Volume flexibility • New product introduction • Computer systems • Future growth • Product innovation	**6. Human Resource**	• Employee relationship • Employee involvement • Workforce • Employee skills • Learning • Labour efficiency • Quality of work life • Resource utilisation • Productivity

Source: Adapted from Hudson et al. (2001)

Financial management can easily be defined as the art and science of managing money; and the associated financial components within it, including the process, institution, markets, and instruments involved with the transfer of money (Ismalaila, 2011; Jacobs, 2001). Proper financial management requires knowledge, skills, and experience, and the related goals include maximising profits and sales, capturing a particular market share, minimising staff turnover and internal conflicts, maintaining survival of the firm, and maximising wealth. Successful financial performance in SMEs has a positive association with the capacity to manage financial issues effectively (Ismalaila, 2011; Jacobs, 2001).

Firm performance also relates to owner's business experience (Mengistae, 2006; Alowaihan, 2004), firm age (Shanmugam & Bhaduri, 2002; Birley & Westhead, 1990) and firm size (Ozgulbas, Koyuncugil, & Yilmaz, 2006; Orser, Hogarth-scott, & Riding, 2000). However, it depends on external judgments about what are the important dimensions to be used by the enterprise and which category the enterprise performance falls on each dimension (Al-Bakri, 2010). In the past decade, an increasing number of companies had started measuring company performance by looking at customer loyalty, employee satisfaction, and other performance areas that are considered as non-financial, in fact more toward measuring people's perceptions toward certain issues that ultimately would lead to product/service enhancements or affect company profitability performance (Ittner & Larcker, 2003).

Performance also can be measured based on technology acquired, received, used, and practised. SMEs can adopt business-to-business (B2B) systems and networks as a business tool to provide, publish, and disseminate information about their available

products and services for targeted market domestically or internationally via mass media and trading partners, to offer technical support and receive payments, or just to mention the few usage of technology. B2B-Electronic Commerce systems affect the efficiency of the business through the usage of highly developed communication technology that facilitates management of business using electronic tools (Wu, Mahajan, & Balasubramanian, 2003), such as the Internet, Twitter, Facebook, or WhatsApp. Thus, B2B systems are expected to facilitate smoothly the interaction of the enterprise with trading partners. In addition, B2B system tools provide information clearly and directly about the supplier's information of the enterprise and can complete information or any documentation for their business purposes (Subramaniam & Shaw, 2002).

Wu *et al.* (2003) asserted that nowadays, adopting web technology in business operations is a compulsory innovation that eventually affects enterprise performance. Hence, the performance of the enterprise will perhaps be improved through the improvement of the task efficiency since B2B systems would shorten the time of trading and management time taken. In addition, the company's performance would increase, as the response rates of the executed tasks will be much faster and more accurate, since the information is keyed-in through the most advance existing computing system and most advance technological tools or software available in the open market (Wu *et al.*, 2003).

The factors that influence performance of small firms can also be classified into two main areas, namely the firm's internal environment (micro-level factors) and the external environment (the macro-level factors) (Kalleberg & Leicht, 1991; Keats & Bracker, 1988). The micro-level determinants include the psychology and demographics

of the owner-manager, the resources of the firm, and the strategies adopted (Kalleberg & Leicht, 1991; Keats & Bracker, 1988), while the macro level determinants consist of, among others, the market, economic, financial, technological, legal, and political conditions as well as the socio-cultural context in which the firm operates (Kalleberg & Leicht, 1991; Keats & Bracker, 1988; Wiklund, 2003).

The market values of enterprises are a fundamental component of measuring the company's performance such as profitability, which has been widely referred to as an indicator of enterprise performance. As time passes by, the enterprise size would expand to become a much larger entity, and even with a more experienced management team that has been developed and without proper consideration, this size increase would finally have adverse effects on the enterprise's performance in terms of effectiveness and efficiency (Banker, Chang, & Natarajan, 2007).

2.4 Government Business Support Services (GBSS)

2.4.1 Overview

Business support services have become conventional wisdom in many countries across the globe, but the precise definition of such services differs considerably among countries throughout the world (Harper, 2005). Mole (2002) conceptualised business support services as an approach used by the government to assist, to improve, to promote, and to provide training to SMEs in hoping for SMEs progress and development according to the government agendas regarding SMEs. Meanwhile, Harper (2005) defined business support services as support services bought and used by the business, excluding finance. However, Yusoff and Yaacob (2010) argued that business support

programme has a positive impact on the development of SMEs to overcome SME limitations in order to ensure and gradually enhance company competitiveness locally and eventually making them ready to go for the international market. Small business development is now a key aspect of economic development strategy.

2.4.2 Types of Business Support Programmes

Government business intervention is not only to support the activities, but also to stimulate entrepreneurship practices among the people (Yusoff *et al.*, 2010). Usually, the business environment is not in favour of SMEs, especially for new start-up businesses. Thus, SMEs need government intervention (Yusoff *et al.*, 2010) to equip SMEs with the characteristics of being innovative, creative, and flexible. Therefore, government business support service can be broadly divided into two categories, namely financial and non-financial support services.

2.4.2.1 Financial Support Programme

SMEs face difficulties in obtaining appropriate financial packages in the start-up, growth, and development phases (Ahmad & Abd Latif, 2012; Mohd Shariff, 2003). Financial support refers to property loan, working capital, and grant (Yusoff *et al.*, 2010). SMEs would benefit from further support to turn their business into attractive investible opportunities.

2.4.2.2 Non-Financial Support Programme

Meanwhile, non-financial support can come in various forms of advisory, technical, marketing, management, networking, distribution, and research and development

initiatives (Harper, 2005). Mathibe (2010) concluded that non-financial support would be in the form of consultancies (Mole, 2002), quality marks (Bennett, Bratton, & Robson, 2000; Bennett, Robson, & Bratton, 2001), business mentoring (Davidson & Burke, 2004; Heilman & Chen, 2003), incubator (Harper, 2005), or business advisor (Berry *et al.*, 2006).

2.4.3 GBSS in Malaysia

Entrepreneurial development is a mechanism to improve the income distribution by stimulating economic growth, and to reshape the economic structure in Malaysia (Ahmad & Xavier, 2012). The Malaysian government has accorded high priority to the development of SMEs (Abd. Aziz & Mahmood, 2011) during the Ninth Malaysia Plan (SME Corp., 2011); as when the government proposed the momentous strategy of *"entrepreneurship as career of choice"* in order influence and facilitate this entrepreneurial phenomenon (Ahmad & Xavier, 2012). There are two forms of initiatives provided by the government, which are (1) financial support, (2) non-financial support in order to strengthen SMEs in Malaysia (Ahmad & Abd Latif, 2012).

In Malaysia, the NSDC was set up as the main body to look after SME development. Among NSDC functions are (1) formulate broad policies and strategies to facilitate the overall development of SMEs across all sectors, (2) review the roles and responsibilities of government ministries and agencies responsible for SME development, (3) enhance cooperation and coordination, as well as guide stakeholders to ensure effective implementation of SME development policies and action plans, (4) encourage and strengthen the role of the private sector in supporting the overall development of SMEs,

and (5) provide emphasis on the development of Bumiputera SMEs across all sectors of the economy.

SME development programmes implemented by various government ministries and agencies are based on three main strategic thrusts that aim at:

1. strengthening the enabling infrastructure that formulate or amend guidelines, standards, licensing requirements, and fiscal incentives governing the operations and activities of SMEs and entrepreneurs,
2. building the capacity and capability of domestic SMEs, and
3. enhancing access to financing by SMEs across all sectors in early stage financing, business expansion financing, and rehabilitation.

There is a whole range of various incentives, grants, and other helpful programmes designed to aid SMEs. Some of them are designed to help SMEs in critical areas such as product development and marketing. Likewise, SMEs being small businesses tend to lack economies of scale, among other barriers, in order to achieve cost-effectiveness.

There are various agencies conducting programmes for SMEs in Malaysia. However, most of the programmes provided are actually similar to and consistent with the study done by Mathibe (2010), who categorised these programmes into the following:

1. Consultancies – There are a number of services available including consultancy training to develop the company in a broader context. To eliminate financial and administrative constraints, GBSS appoints permanent staff through subsidised private sector consultants to perform business support functions on their behalf

(Mole, 2002; Lambrecht & Pirnay, 2005) to a particular area to deliver support services to a group of new and existing SMEs (Turok & Raco, 2000). For example, advisory support by SME Corp and SME Bank.

2. Quality Marks – Quality marks are awarded to SMEs by recognised institutions to measure the quality of products and services provided by SMEs (Bennett *et al.*, 2000; Bennett *et al.*, 2001; Bennet & Robson, 2003). Quality marks refer directly to the product quality but can also include aspects of environmental quality during the production process (Greenan, Humphrey, & McIvor, 1997). In many cases start-up grants are used by SMEs in order to introduce their quality marks to the market industry (Bennett *et al.*, 2000). For example, the Enterprise 50 Award Programme by SME Corp. that recognises the achievements of home-grown companies, as well as promoting them.

3. Business Mentoring – Business mentors have the practical experience and contacts to help businesses make correct choices (Mathibe, 2010). Mentoring provides guidance and support from an external perspective and signpost a business to appropriate external advice. Mentoring programmes commonly foster support for research and development offers, business skills training workshops, and group mentoring sessions to SMEs, as listed by Mathibe (2010):
    i. face-to-face mentoring and networking opportunities help SMEs to better equip themselves and their employees (Heilman & Chen, 2003; Davidson

& Burke, 2004), for example, Industrial Linkage Programme provided by SME Corp.;

ii. subsidised cost of pitch training and presentation workshops for SMEs;

iii. facilitation of access to domestic and international forums where SMEs can pitch to potential investors and strategic partners;

iv. market development, intellectual property protection, and legal costs and also financial assistance for research programmes and research projects; and

v. provision of experienced business person or mentor to help SMEs in developing and improving their businesses, while large firms are also used in some instances to mentor emerging entrepreneurs regarding the development of their SMEs.

4. Incubator – In addition, in the early growth stages, incubators helps small businesses through providing them rental space, shared office services, management and business assistance, and a creative entrepreneur environment (Mathibe, 2010; Harper, 2005). Those services are provided in exchange for rent payments and occasionally equity in the business or future royalties. Rental arrangements can include access to conference facilities, custodial service, building security, furniture and equipment rental, luncheon facilities, and other physical amenities.

   Incubators also provide shared office services like copying, clerical assistance, mail service, word processing, shipping and receiving, and answering and

receptionist services. Incubators also include entrepreneurial training, product evaluation, business forecasting, assessment of technical and commercial risks, marketing, financial and managerial assistance, and patent and legal assistance (Mathibe, 2010; Harper, 2005).

5. Business advisor – A business advisor is defined as someone who provides one or more skills and knowledge in related fields pertaining to business operations (Schaper & Vollery, 2004). A business advisor is the organisation or individual that provides advisory services either verbally or in written form relating to preparation of financial statement, tax compliance, law, financing, operation, and financial management (Yusoff & Yaacob, 2010; Stanger, 2004). Both definitions portray a business advisor as someone who has the capability to give input to the business owner for betterment of his or her business. A business advisor also acts as a mentor and sells the idea for implementation in business operations (Berry *et al.*, 2006)

2.5 Organisational Absorptive Capacity

Absorptive capacity has been widely studied by organisational and innovation researchers. Most research focused on the identification of the determinants of absorptive capacity for different types of knowledge (Lane *et al*., 2006; Malhotra, Gosain, & El Sawy, 2005; Zahra & George, 2002a; Cohen & Levinthal, 1990). Absorptive capacity is defined as a firm's ability to identify, assimilate, and exploit external knowledge to commercial ends (Cohen & Levinthal, 1990). Absorptive capacity is high if companies can learn how to make use of new knowledge within their processes

and implement a change that increases their competitiveness (Francalanci & Morabito, 2008).

Cohen and Levinthal (1990) offer the most widely cited definition of absorptive capacity by pointing out the following:

> . . . absorptive capacity refers not only to the acquisition or assimilation of information by an organisation but also the organisation's ability to exploit it. Therefore, an organisation's absorptive capacity does not simply depend on the organisation's direct interface with the external environment. It also depends on the transfers of knowledge across and within subunits that may be quite removed from the original point of entry. Thus, to understand the sources of a firm's absorptive capacity, we focus on the structure of communication between the external environment and the organisation, as well as among the subunits of the organisations, and also on the character and distribution of expertise within the organisation (pp. 131-132).

Given this description, research related to a firm's ability to acquire, transfer, and assimilate new ideas and then put them into concrete actions within the firm can be seen as falling within the conceptual foundation established by Cohen and Levinthal (1990).

More recently, Zahra and George (2002b) re-conceptualised absorptive capacity as a set of organisational routines and processes. Scholars further differentiate two types of absorptive capacity—potential and realised, where the former consists of acquisition and assimilation and latter of transformation and exploitation. Zahra and George (2002a) provided a general model that conceptualises absorptive capacity as a dynamic construct with four underlying organisational capabilities, as follows:

i. acquisition – represents the ability to identify new knowledge and realise its potential benefits,

ii. assimilation – the process of internalisation that allows employees to reach a deep understanding of new knowledge,
iii. transformation – represents the individual ability to accept change in one's own job necessary to make use of new knowledge, and
iv. exploitation – represents the result of enacting change and reaping benefits at an organisational level.

The absorptive capacity of an organisation depends on absorptive capacity at the individual level. However, absorptive capacity of an organisation is not merely the sum of the absorptive capacities of its employees. It is the cooperation among individuals that enables the exploitation of new external knowledge and, hence, successful change (Malhotra *et al.*, 2005; Zahra & George, 2002a).

Ucbasaran, Lockett, Wright, and Westhead (2003) indicated that absorptive capacity has two major functions, namely (1) wealth creation, and (2) protection of shareholders' interests. Absorptive capacity enables the threshold firm to make sense of external knowledge, interpret it, combine it with existing knowledge, and successfully exploit it commercially. This capacity facilitates exploration activities that enhance the firm's innovativeness that leads to value creation.

Meanwhile, in the field of organisational studies, an increasing number of organisational theorists have recently emphasised how an organisation's absorptive capacity can strongly influence its actions and outcomes. For example, the absorptive capacity concept has been widely applied in investigations on investment in research and

development (Cohen & Levinthal, 1994), information technology use (Boynton, Zmud, & Jacobs, 1994), innovation in banking services (Buzzacchi, Symanski, & Valetti, 2003), research productivity in the pharmaceutical industry (Cockburn & Herderson, 1998), strategic alliances (Koza & Lewin, 1998), and organisational learning (Shenkar & Li, 1999).

2.6 Relationships between GBSS and SME performance

According to Storey (2003), almost all developed economies provide some form of subsidised information and advice for smaller businesses. A range of training, information, and advice programmes are often available to assist entrepreneurs. These programmes are most commonly provided or funded by the public sector, but have also been provided by private sector organisations and through public-private partnerships.

There has been a considerable rise in firm's use of business advice, whether from government agencies, professional service firms, or research and educational organisations (Bennett & Robson, 1999). There are a number of literature works that discussed on the essentials of GBSS to SMEs. One of the studies showed that government interference is critical as SMEs possess a myriad of weaknesses in terms of lacking of resources. Lack of skill, insufficient capital, and other basic resources are among the limitations that hinder the rapid development of SMEs. Considering the significant role of SMEs to the nation, the government has continuously put an effort to support their activities. GBSS is among the important tools to ensure SMEs remain resilient and competent to face a dynamic economic environment (Yusoff *et al.*, 2010).

In addition, Wren and Storey (2002) stated upon the positive effects on growth in sales turnover and employment of marketing advice provided to mid-sized (£0.3 million to £2.0 million turnover) SMEs in the UK government's enterprise initiative. On the other hand, Park and Ren (2001) empirically contrasted the implementation of microfinance services provided by non-government versus the Chinese government. Their tests indicated that micro-finance NGOs have positive results in targeting, sustainability, and impact, whereas government programmes do not.

The study done by Berry *et al.* (2006) found that SMEs whose owner-managers were high users of a range of business advice were also those that were growing most quickly, hence the contribution of advisers of many kinds did make a positive contribution to SME growth. These findings were in concert with and extend those of Bennett and Robson (1999), and Wren and Storey (2002).

In Korea, the Korean small and medium business administration increased the amount of R&D government budget from about USD330 million in 2008 to about USD375 million in 2009. However, according to the study by the Korea Institute for Industrial Economics and Trade in 2008, the government's R&D support policy has a limited amount of effect on a firm's performance (Park & Kim, 2010).

2.7 Relationships between SME Performance and Organisational Absorptive Capacity

Absorptive capacity has been recently identified as a crucial dynamic capability in knowledge-based competition (Fosfuri & Tribo, 2008) and gradually become a key

driver of a firm's competitive advantage (Cockburn & Herderson, 1998). A firm's absorptive capacity depends on its existing stock of knowledge, much of which is embedded in its products, processes, and people. Thus, a firm's knowledge base plays both the role of innovation and absorption (Cohen & Levinthal, 1989).

Meanwhile, R&D investment is a necessary condition for the creation of absorptive capacity (Tsai, 2001). An organisational unit's absorptive capacity also affects its business performance. Its impact on business unit innovation and performance depend on the extent to which a unit can absorb such new knowledge. Such a central network position will have a more positive impact on the unit's innovation output and business performance if the unit has high absorptive capacity with which to effectively transfer knowledge from other units.

Entrepreneurs create new ventures in order to exploit opportunities and create wealth by offering innovative products, goods, and services. To be successful, these ventures need to build and maintain novelty in their products (Zhang & Haiyang, 2010). Absorptive capacity helps the firm to identify more available knowledge flows. In other words, the amount of external knowledge that the firm perceives is an increasing function of its absorptive capacity (Escribano *et al.*, 2009).

Subsequently, for a given quantity of identified external knowledge flows, the degree by which the firm derives benefits also depends on its absorptive capacity. The former effect is what other scholars refer to as: ability to identify, ability to evaluate; or

potential absorptive capacity; the latter effect is labelled typically as: ability to use; ability to exploit; or realised absorptive capacity (Escribano *et al.*, 2009).

A firm's absorptive capacity depends on its existing knowledge stock, much of which is embedded in its products, processes, and people. Thus, a firm's knowledge base plays both the role of innovation and that of absorption (Cohen & Levinthal, 1989). To put it differently, the drivers of absorptive capacity are highly correlated with the inputs from the innovation process as well as a firm's innovation ability, and it is not easy to estimate their individual effect on innovation performance.

A company's absorptive capacity in the present depends on the efforts it has made to innovate in the past (Cohen & Levinthal, 1990). Companies have to learn many new skills especially to requisite absorptive capacity (Cohen & Levinthal, 1990) for a greater ability to learn how to develop and use new knowledge (Zahra & George, 2002b). By sharing experience especially in the top management, it helps the team to produce tacit knowledge of strengths, weaknesses, and idiosyncratic habits of team members. Without this knowledge, managers cannot function well as a team, and they would be less willing to incur irreversible investments under uncertainty.

If the firm does not develop its absorptive capacity in some initial period, then its beliefs about the technological opportunities present in a given field will tend not to change over time, because the firm may not be aware of the significance of signals that would otherwise revise its expectations. As a result, the firm does not invest in absorptive capacity and when new opportunities subsequently emerge, the firm may not appreciate

or take advantage of them. Compounding this effect, to the extent that prior knowledge facilitates subsequent development of absorptive capacity, the lack of early investment in absorptive capacity makes it more costly to develop a given level of it in a subsequent period (Cohen & Levinthal, 1990).

2.8 Relationship between GBSS and Organisational Absorptive Capacity

A research conducted by Nieto and Quevedo (2005) demonstrated that absorptive capacity determines innovative effort to a greater extent within an industrial structure. In the presence of absorptive capacity, innovative efforts made by a company will be independent of industrial conditions. A company is well placed to take advantage of all possible sources of know-how, whether internal or external. Therefore, companies that have successfully accumulated a certain capacity for absorption in the past will have a greater propensity to innovate in the present. Grabowski (1968) also mentioned that firms which have a record of innovating in the past will influence the decision to put more effort into innovation in the present, and thus expected to give rise to fresh innovations in future.

Moreover, decisions are complex especially when made in rapidly changing environments (Zahra, Rawhouser, Bhawe, Neubaum, & Hayton, 2008). Inevitably, managers need to acquire resources from external sources. Therefore, Leonard-Barton (1995), and Zahra and George (2002a) proposed that external providers of resources will demand increased managerial accountability which can be achieved through effective boards. Executives also need to learn how to mobilise and deploy these resources,

effectively. Measures of managers' skills, experiences, and cognitions are key indicators of firms' absorptive capacity.

Similarly, the extent and nature of the networks of management and board members provide measures of social capital related aspects of absorptive capacity. Social capital can determine the pace, timing, and type of external knowledge flows that can influence absorptive capacity. Other measures of this capacity include R&D investments (Cohen & Levinthal, 1990). Managerial accountability and absorptive capacity can sometimes substitute for each other while being complementary under other circumstances.

Meanwhile, Tsai (2001) argued that organisational units can produce more innovations and enjoy better performance if they occupy central network positions that provide access to new knowledge developed by other units depends on units' absorptive capacity, or ability to successfully replicate new knowledge. Both external knowledge access and internal learning capacity are important for a unit's innovation and performance (Tsai, 2001). Absorptive capacity tends to develop cumulatively and builds on prior related knowledge.

Thus, organisational units that possess relevant prior knowledge are likely to have a better understanding of new technology that can generate new ideas and develop new products. Absorptive capacity results from a prolonged process of investment and knowledge accumulation. An organisational unit's absorptive capacity for learning depends on its endowment of relevant technology-based capabilities (Mowery, Oxley, & Silverman, 1996).

Additionally, R&D investment is a necessary condition for the creation of absorptive capacity (Tsai, 2001). An organisational unit's absorptive capacity also affects its business performance. Its impact on business unit innovation and performance depend on the extent to which a unit can absorb such new knowledge. Such a central network position will have a more positive impact on the unit's innovation output and business performance if the unit has high absorptive capacity with which to effectively transfer knowledge from other units.

Moreover, the interaction between network position and absorptive capacity is critical to intra-organisational knowledge sharing. Without a simultaneous consideration of its network position and absorptive capacity, a unit is likely to encounter a *"search-transfer problem"* in which it cannot transfer the knowledge it identified through its network search (Hansen, 1999).

The research by Tsai (2001) also indicated that a unit's innovative capability is significantly increased by its centrality in the intra-organisational network, which provides opportunities for shared learning, knowledge transfer, and information exchange. A high absorptive capacity, that is associated with a better chance to successfully apply new knowledge toward commercial ends, produces more innovations and better business performance. Improving business performance is one of the most important objectives for business units in large, complex organisations (Gupta & Govindarajan, 1986).

Meanwhile, firms also invest in absorptive capacity directly, as is the case when they send personnel for advanced technical training. An organisation's absorptive capacity will depend on the absorptive capacities of its individual members. Absorptive capacity refers not only to the acquisition or assimilation of information by an organisation but also to the organisation's ability to exploit it. Therefore, an organisation's absorptive capacity does not simply depend on the organisation's direct interface with the external environment. It also depends on transfers of knowledge across and within sub-units that may be quite removed from the original point of entry (Cohen & Levinthal, 1990)

2.9 SME Corporation Malaysia (SME Corp.)

2.9.1 Background of SME Corp.

SME Corporation Malaysia (SME Corp.) is the central point of reference for information, reference, and advisory services for all SMEs in Malaysia. SME Corp. began on 2 May 1996, formerly known then as Small and Medium Industries Development Corporation (SMIDEC). SMIDEC was tasked to officially transform into SME Corporation Malaysia, now known better as SME Corp., which commenced on 2 October 2009.

In 2007, the National SME Development Council (NSDC) had appointed SME Corp. as the single dedicated agency that will formulate overall policies and strategies for SMEs across all related ministries and agencies in Malaysia. SME Corp. had taken over the role of the Secretariat of the Council from Bank Negara Malaysia to coordinate the policy formulation and SME development programmes to ensure comprehensive and effective implementation across all sectors (SME Annual Report, 2007). SME Corp. also

disseminates information on SME performance and statistics, and conduct research on SME related issues and development that previously was formulated by the highest policy-making body in Malaysia, NSDC.

SME Corp. delivers a mission on promoting the development of competitive, innovative, and resilient SMEs through effective coordination and provision of business support. It is based on functions, which are as follows (SME Annual Report, 2011):

i. To coordinate the policies and programmes for SMEs – Formulate broad SME policies across all sectors and also coordinate, monitor, and evaluate effective implementation of policies and programmes across relevant ministries and agencies.

ii. As a centre for information and advisory for SMEs – SME Corp. provides SME Business Centre as business advisory, disseminate information on government funds and incentives on SMEs, channel for feedback on SME issues, and liaison for domestic and international communities on SME matters.

iii. To manage the SME data and disseminate research findings on SME – SME Corp. manages the National SME Database, undertakes research on SMEs, publishes SME related report and statistics, and also undertakes outreach programmes.

iv. Act as a Business Support – SME Corp. nurtures and develops competitive SMEs through specific capacity building programme and financial assistance, provides infrastructure support for SMEs, and facilitates linkages with large companies and MNCs.

v. As a Secretariat to NSDC – SME Corp. proposes policies and ensures decisions of the NSDC are effectively implemented.

On the whole, SME Corp. is the main supervisory body and administrator for 15 ministries and 60 agencies involved with Malaysian SMEs for various SME Grant Schemes and disseminator of information for SMEs. SME development programmes have evolved towards more result-based approach (SME Annual Report, 2011).

In 2011, a total of 183 programmes amounting RM4.7 billion were implemented across various ministries and agencies, and had benefited a total of 681, 263 SMEs (SME Corporation, 2011). In terms of the number of programmes, the majority (33%) were for human capital development, followed by programmes for access to financing (25%), innovation and technology adoption (19%), and market access (17%) (SME Annual Report, 2011)

2.9.2 SME Corp. Malaysia Development Programme

SME development programmes implemented by SME Corp. Malaysia are summarised in Table 2.12.

Table 2.12
SME Corp. Development Programmes

No.	Development Programmes	Description

1.	SMIDEC Showcase	• An annual event for:
		  • SMEs to exhibit their products and service.
		  • Multinational Companies (MNCs) to seek potential suppliers among SMEs.
		  • To provides SMEs with opportunities to network regionally and exchange ideas and information on technology and innovation.
		  • As venue for outsourcing exchange.

2.	The Enterprise 50 (E50)	• A prestigious Award Programme that recognises the achievements of Malaysian SMEs which are well positioned for the future based on financial capabilities and also operations and management skills. • To encourage and recognise the entrepreneurial spirits in local companies.

3.	SCORE Programme	• SCORE is a diagnostic tool used to rate and enhance competitiveness of SMEs based on their performance and capabilities.
		• The capability and performance is measured based on seven parameters that vary across sectors. Examples of parameters for manufacturing and MRS are:
		  • Business Performance
		  • Financial Capability
		  • Management Capability
		  • Production Capacity
		  • Technical Capability
		  • Quality System
		  • Innovation
		• It is used to identify strengths and weaknesses of SMEs for further recommend measures for improvements or facilitate linkage of potential SMEs with MNCs.

4.	1-InnoCERT	• 1-InnoCERT is a programme to identify and certify innovative enterprises and SMEs.
5.	The National Mark of Malaysian Brand	• A Trustmark that depicts Quality, Excellent and Distinction of Malaysian products and services • It is an incentive from SME Corp. Malaysia for qualifying SMEs only. • SMEs will receive an invitation to specific training by SME Corp. Malaysia and its partners and also special access passes to mentoring programmes.

6.	Business Matching	• Through Business Linkage Programme, this programme is implemented to promote competitive SMEs to be supplier of parts and components, products, and services to MNCs or GLCs.
7.	Branding Innovation Centre (BIC)	• In collaboration with Lim Kok Wing University of Creative Technology (LUCT), this programme was initiated to promote branding to SMEs in Malaysia and to assist them in building and developing their own brand of products. • Branding and Packaging Mobile Gallery will reach out to rural SMEs to provide awareness across the country on the importance of innovative branding and packaging in meeting global market needs. • A bus has been allocated which operates as the Mobile Gallery in Peninsular Malaysia.
8.	Skills Upgrading Programme	• A short term courses under training centres appointed by SME Corp. Malaysia. • It is to enhance the skills of the workforce in order increasing the efficiency, productivity, professionalism and capabilities of SMEs. • It also enhances skills and capabilities of SMEs from the aspects of technical and soft skills.

9.	Business Accelerator Programme (BAP), & Enrichment and Enhancement Programme (E^2)	• Programme that facilitates SMEs to be helps through an integrated advance with guidance, building capacity and capability and also access to financing.
		• SMEs will receive business and technical advisory services.
		• Component:
		  • Diagnostic – To rate and enhance competiveness
		  ▪ BAP through SCORE Programme (SME Competitiveness Rating for Enhancement Programme).
		  ▪ E^2 through M-CORE Programme (Micro Enterprise Competitiveness Rating for Enhancement)
		  • Capacity Building – Short term courses on skills upgrading that provided by SME Corp. under 40 training centres or through brand awareness.
		  • Advisory and Technical Support – One Referral Centre (ORC) on various fields such as Financial Management, Maintenance and Quality Assurance.
		  • Facilitating Access to Financing – Advisory services related to access to financing provided by various financial institution.

10.	SME Expert Advisory Panel (SEAP)	• Three-phase programme that provides on-site assistance and transferring technology as well as technical know-how to the SMEs by the industry experts.
11.	SME Mentoring Programme	• A strategic collaboration between SME Corp. Malaysia and Halal Industry Corporation to develop and enhance capabilities of local SMEs in Halal Food and Beverage (F& b) industry. • It offers SMEs the opportunity to share, explore, and enhance their knowledge on improvement in business performance for future planning to compete globally.
12.	SME @ University Programme	• To develop capable human capital that will drive diverse management innovation and creativity in developing business acumen among new and existing entrepreneurs. • The programme is based on the model of SME University of Japan, a hands-on approach that ensures the participants gain knowledge on entrepreneurship and business tools.

Source: Adapted from SME Annual Report (2011).

2.10 Underpinning Theory

2.10.1 Resource-Based View (RBV) Theory for SME performance

In this dissertation, the theoretical framework is based on the resource-based view (RBV) theory of the firm (Masakure, Henson, & Cranfield, 2009; Lockett & Thompson, 2001; Barney, 1991) by Jay Barner, Father of Modern resource-based view. The theory is a body of thought in strategic management which has been applied to the analysis of SMEs in developing countries and applicable for this research.

The resource-based view theory is rooted in the work of Penrose (1959) who argued that a firm is a collection of productive resources of a wide range of strategic management topics (Kang & Park, 2012). This theory explains differences in firm performance. This theory suggests that there can be heterogeneity of firm-level differences among firms that allow some of them to sustain competitive advantage (Lavie, 2004). Therefore, the

resource-based view theory emphasises strategic choice charging the firm's managerial with the important task of identifying, developing, and deploying key resources to maximise returns.

According to Gottschalk (2007), and Conner and Prahalad (2002), resources influence firm performance. Firm's competitive advantages can be derived from the availability of resources that are valuable, unique, and difficult to initiate (Garud & Kumaraswamy, 2005). Firms can generate a sustained competitive advantage and achieve Ricardian rents when the firms' resources are valuable, rare, imitable, and organised (VRIO, formerly known as VRIN; non-substitutable) (Kang & Park, 2012; Lavie, 2004; Peteraf, 1993; Barney, 1991; Conner, 1991). Even though most of SMEs have their own unique product, they do not have the required capability on resources (financial or non-financial) that can create and sustain competitive advantages. Therefore, only a few of the many possible resources are capable of generating sustained competitive advantage (Wade & Hulland, 2004). To enable a unique product to be facilitated into the customer's choice of products, there is a need for government support service, for example on product design and technologies on packaging, and at the same time the company needs to maximise these services to ensure increased company performance.

Moreover, in a complex phenomenon of growth, SME Growth Theory has increased understanding of SME performance (O'Farrell & Hitchens, 1988). The growth process of a firm involves various patterns of decisions and strategies. SME growth is viewed as a series of phases or stages (Table 2.13) of development through which the business may

pass in an enterprise life-cycle. It is essential to be able to demonstrate more substantial longer-term vision and strategic intent amongst owner-managers.

Table 2.13
Four Stages of Firm's Development

Stage 1 – *Conception and Development* • Focusing on product development and design • Securing adequate financial resources and developing a market • Formality and procedures are non-existent
Stage 2 – *Commercialisation* • Has a product that performs well and meets a need in the market place • Has the capability to produce and sell • Has some revenues and some backlog of orders
Stage 3 – *Growth* • Achieve high growth rates in both sales and marketing • Focusing on how to produce, sell, and distribute products in volume while attaining profitability • Has own products
Stage 4 – *Stability* • Development of second, third generation products and/or totally new product lines • Securing growth funding and market share • Penetrating new geographic territories

Source: Kazanjian (1988)

Meanwhile, according to the resource-based view of organisations, absorptive capacity represents the ability of a company to translate a change in a combination of input resources into organisational performance (Malhotra *et al.*, 2005; Zahra & George, 2002a). Firms enter into linkages with external entities to acquire resources they lack and or to reduce the risks associated with innovation efforts (Lee & Wong 2009; Tether, 2002). There is a tight relationship between absorptive capacity and innovation ability of a company, that is, a company's ability to perform successful change (Cohen & Klepper,

1996), because the greatest part of innovation efforts are made by and within the firms themselves (Nelson, 2000).

Zahra and George (2002a), differentiate two subsets of absorptive capacity, namely (1) potential absorptive capacity (PACAP), which entails acquisition and assimilation, and (2) realised absorptive capacity (RACAP), which refers to transformation and exploitation. These four dimensions are combinative in nature and build on one another to yield an organisational dynamic capability.

While pursuing this line of exploration, Zahra and George (2002b) defined an "effectiveness rate" or "efficiency factor" as the ratio of the real transformation of PACAP to RACAP. Firms with high efficiency factors are more skilled in developing and using knowledge or designing RACAP, and they ultimately achieve better organisational performance. The impact of RACAP on performance depends on the "regimes of appropriability", which refers to the regulative and industry specific features affecting the firm's capacity to protect and benefit from the prescribed advantages, in terms of products and processes. Figure 2.1 shows the outline of the model by Zahra and George (2002a).

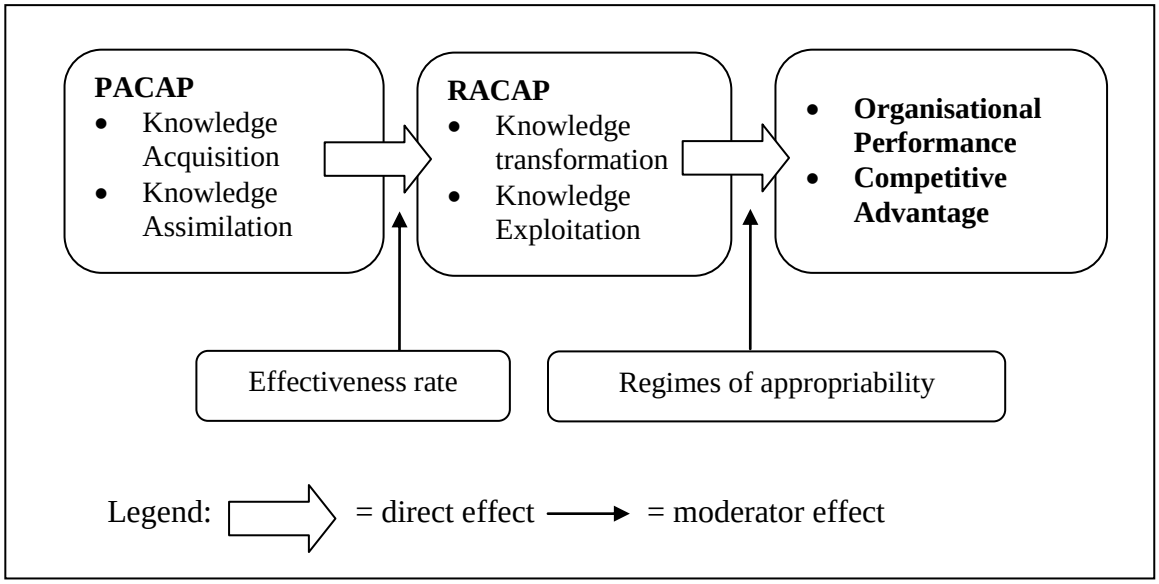

Figure 2.1
Relationships among PACAP, RACAP, and Organisational Performance
Source: Zahra and George (2002a)

In line with the absorptive capacity model, the literature under the RBV theory considers absorptive capacity as a strategically valuable capability since it is a path-dependent, firm-specific, and socially embedded means to use other firms' knowledge to create competitive advantage especially from the external perspective.

In this dissertation, absorptive capacity is a theory that has no control but it still affects the requirements of the whole system. Some scholars found that this relationship is not consistent, some found a positive relationship, and some found a negative relationship, whereas some found that there is no relationship at all. Therefore, there may be some contingent variable that perhaps have not been investigated thoroughly which could account for this inconsistency.

In order to emphasise the understanding about the resource-based view theory (as the main theory), this researcher will also refer to SME Growth Theory and Absorptive Capacity Theory for understanding the concepts both in part and as a whole as illustrated in Figure 2.2. Therefore, the conceptual development treats System Theory to regulate the internal environment and tends to maintain stable and relatively constant conditions.

Basically, in System Theory, SME Growth Theory works in an environment of Resource-Based View Theory while Absorptive Capacity Theory is like a bridge between both. Even though Resource-Based View Theory only maximises the usage of internal resources, whereas, Absorptive Capacity Theory maximises any resources either internal or external resources, this framework actually related positively. Hence, this is an interacting component that works together with the relationships among variables that permit the identification of a process. This relationship provides a trans-disciplinary framework between perception and conceptions of the framework.

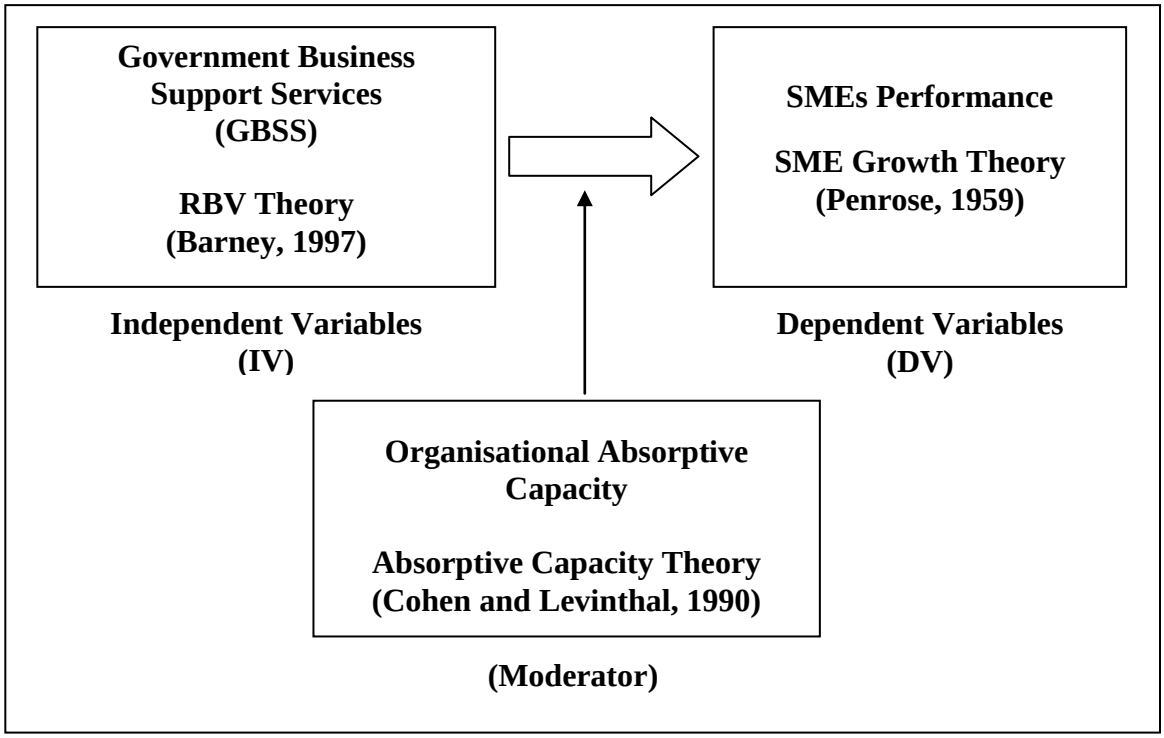

Figure 2.2
Conceptual Development

2.11 Summary

This chapter discussed the importance of SMEs, SME performance, role of GBSS in developing SMEs, organisational absorptive capacity, and the relationships among all investigated variables. To address the questions of how GBSS components, SME performance and organisational absorptive capacity are related, the next chapter develops a conceptual model based on Resource-Based View Theory. This research was derived from the previous literature and specific research hypotheses concerning the links among the constructs that are also presented in the following chapter.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

From the previous extensive examination of literature, the development of several research propositions that requires validation had been highlighted. This chapter describes the adopted research methodology employed by the researcher to test the hypotheses for this study. There are several elements that need to be attended to in the research methodology, which will assure the credibility of the findings for this study. Thus, this chapter is organised into nine sections, beginning with a description of the research framework (Section 3.2) that provides an explanation of the variables involved, followed by the research design (Section 3.3) containing the structure of investigation. These are then followed by the questionnaire development (Section 3.4) and data collection methods (Section 3.5). Next, this chapter explains the measurement validity and reliability (Section 3.6), Pilot Test results (Section 3.7), data collection (Section 3.8) of the actual study, followed by the data analysis tools and techniques used in this study (Section 3.9). Finally, this chapter concludes with a summary for this chapter (Section 3.10).

3.2 Research Framework

The theoretical framework of this study was adapted from the previous study by Park and Kim (2010) on SME performance in Korea. Park and Kim (2010) verified the specific and detailed impact of the government's R&D policy programme including direct fund support, human resources, and technological support. To add value and

contribution, this study divided the assistance provided by the Malaysian government into two, which are financial and non-financial support. Also, the researcher included the moderating effect of organisational absorptive capacity. Based on the literature review, the conceptual model is illustrated in Figure 3.1.

Basically, the theoretical framework was based on the Resource-Based View (RBV) Theory of the Firm (Barney, 1991; Lockett & Thompson, 2001), a body of thought in strategic management which has been applied to the examine SMEs in developing countries. Theoretically, if firms face similar external environments (for example product and factor markets), then those enterprises with similar initial resource endowments, all else being equal, should display similar behaviour and performance.

The theory and evidence suggests that much of the variance in enterprise performance emanates from a heterogeneous distribution of resources and capabilities across competing firms, while industry and market attributes play a relatively small role (Hawawini, Venkat, & Verdin, 2003; Lockett & Thompson, 2001; Rumelt, 1991; Barney, 1991).

The framework consists of three kinds of variables, namely independent variable (predictor), dependent variable (criterion), and also moderator variable. The predictor in this study is the government business support services (GBSS) while the criterion is SME performance. The third variable that may affect the direction and/or strength of the relation between both variables is organisational absorptive capacity. This theoretical framework was developed in order to show the relationship between all variables.

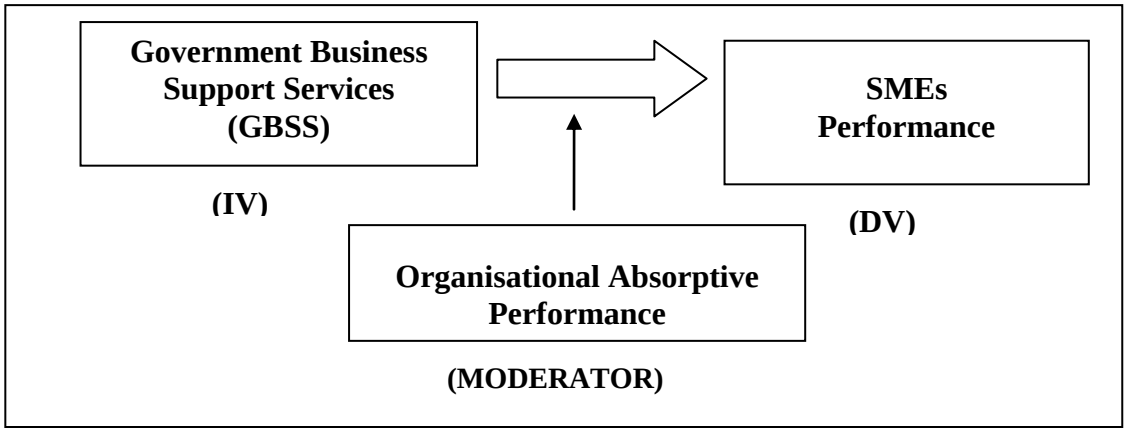

Figure 3.1
Research Framework

3.2.1 Variables Discussion and Hypotheses Development

The process started by selecting the most suitable variables for this study. Based on published journals between 1996 until 2012, there are about 25 refereed articles that fulfil three criteria, which are (1) the study discusses on business advisory, (2) the sample composes of SMEs, and (3) the study is empirical. Table 3.1 presents a listing of the variables used in the various articles.

Table 3.1
The Summary of Variable Used Based on 25 Articles

INDEPENDENT VARIABLES		**DEPENDENT VARIABLES**	
Variables	**Frequency**	**Variables**	**Frequency**
Entrepreneurial ability	8	Firm performance	7
Management skill	7	Information asymmetry	4
Firm size	4	Firm growth	5
Age of firm	5	Business success	2
Technology	2		
Gender	4		
Finance gap	7		
Government's finance support	8		
Government's technology or human resource support	3		
SME needs	2		
Age of the owner	1		

From Table 3.1, majority of the scholars used government's finance support, entrepreneurial ability, and management skill as independent variables, and performance as the dependent variable.

3.2.2 Independent Variables (GBSS)

An independent variable is a variable that stands alone and is not changed by other variables. It influences the dependent variable in either a positive or negative fashion (Sekaran, 2005). For this study, the independent variables identified from government

business support services are the programmes that provided assistance to address the support needs of entrepreneurs by providing financial and non-financial support.

3.2.2.1 Financial Support by the Government

SMEs need appropriate financing in order to achieve their growth potential (Mohd Shariff, Saad, & Ali, 2006). There has been some research into the matter of why small business fails (Mbonyane, 2006). For example, Dickey (1994) indicated that cash flow is not properly managed, non-participating board exists (Hall, 1995), and problems associated with budgeting, stock control, and record-keeping (Kinunda-Rutashobya & Olomi, 1999). Ladzani and Van Vuuren (2002) believed that a considerable number of small businesses fail even before they start to operate (Mboyane, 2006).

One of the essential elements that contribute to SME performance is the availability and access to financing (Ismail, 2009). SMEs depend much on internal finance for initial funding. Nowadays, the government provides huge amount of funds made available to SMEs via various schemes and programmes provided by external financiers (Abdullah & Ab Manan, 2011). Therefore, governments throughout the world attempt to promote economic progress by focusing on SME development (Kongmanila & Kimbara, 2007; Haper & Soon, 1979), including Malaysia. Park and Kim (2010) also indicated that their government had allocated a huge budget to invest in financial, and research and development in Korea.

Specifically, family-owned SMEs are lacking in financial capital but at the same time tend to have difficulty accessing the financial markets (Kongmanila & Kimbara, 2007).

The main problem for SMEs to remain in business is because SMEs cannot cope without enough capital. To that end, banks in Malaysia have tailored solutions. For example, SME Bank, as its name implies, target mainly SMEs. As a government-linked bank, this assistance fulfils the needs of SMEs and their business growth. Advisory services would include evaluations, training, orientations, and access to knowledge and information on how SMEs can improve or enhance its business performance.

After receiving support from the government, SMEs do maximise the government's financial support. Therefore, this researcher surmised that SME development is influenced by financial support from the government.

H_1 : There is a positive relationship between financial support provided by GBSS and SME performance.

3.2.2.2 Non-Financial Support by the Government

The ability to maintain knowledge continually in relationships is where competitive advantage lies (Lorenzoni & Lipparini, 1999). Compared with large firms, SMEs with their managerial infrastructure tend to rely less on costly research and development (R&D) investment for innovation activities (Jones & Craven, 2001). Consequently, to innovate and gain competitive advantage in the market, SMEs need to exploit other internal facilitating factors such as human capital.

A research by Murphy *et al.* (1996) indicated that the government in South Africa had been provided a situation to address, where policies and procedural guidelines are

offered for promoting the growth of SMEs. In Namibia, the government gave support that include providing training courses (book keeping, negotiation skills, customer care, and starting a business), workshop, business matching facilitation, advice, and advocacy and lobbying. Even in Finland, SMEs receive the provided services categorised by the purpose for which the services is targeted at.

Most of SMEs fail due to lack of knowledge and technology (Miller, McAdam, Mofferr, & Brennan, 2011). Knowledge is recognised as a key input in the technology transfer and innovation process (Spithoven, Clarysse, & Knockaert, 2010; Reychav & Weisberg, 2010). Many studies focused on the development and application of various forms of knowledge throughout the technology transfer processed whereby there is a high degree of transience and progression with ideas being developed into patents, licenses, and subsequent spinout companies (McAdam, McAdam, Galbraith, & Miller, 2010).

Flexible and dynamic networks are key sources of knowledge for technology transfer activities (Knockaert, Spithoven, & Clarysse, 2010). However, retaining and maintaining knowledge internally can be costly for an organisation as it involves a considerable amount of resources to internalise and the organisation needs to constantly evaluate knowledge so that it does not become redundant (Lichtenthaler, 2008). Lichtenthaler (2008) highlighted that retaining and maintaining knowledge externally has several advantages. For example, it enhances a firm's flexibility by having a large network of knowledge sources to draw from, consequently this reduces the need for a large internal knowledge base which facilitates a leaner organisational and helps build prior knowledge to aid the absorptive capacity of an organisation.

The literature shows that government and donors could only reach a limited number of SMEs. Therefore a targeted client approach was introduced in order for reaching them effectively (Orford, 2005). The government needs to allocate some non-financial support according to the nature of the business as well as the needs of the company. Therefore, this researcher will emphasise non-financial support from the government, which gives rise to the following hypothesis:

H_2 : There is a positive relationship between non-financial support provided by GBSS and SME performance.

3.2.3 Moderator (Organisational Absorptive Capacity)

In this study, absorptive capacity has been chosen as a moderator to introduce the topic, observe, and take notes on the discussion. The selection of and role played by the moderator are critical because this variable never becomes an integral part of the research (Baron & Kenny, 1986),but persuasively obtains all relevant information and helps to get through any impasse that might occur. In general terms, a moderator is a qualitative or quantitative variable that affects the direction and/or strength of the relationship between an independent and dependent variables (Baron & Kenny, 1986). The moderator will not dominate any result as it observes the study in a one-way mirror perspective (Sekaran, 2003). Therefore, absorptive capacity may or may not strengthen the relationship between GBSS and SME performance, since absorptive capacity is not an absolute moderator.

The model diagrammed in Figure 3.2 has three causal paths that feed the outcome variables of task performance, namely the impact of the noise intensity as a predictor (Path a), the impact of controllability as a moderator (Path b), and the interaction of product of these two (Path c).

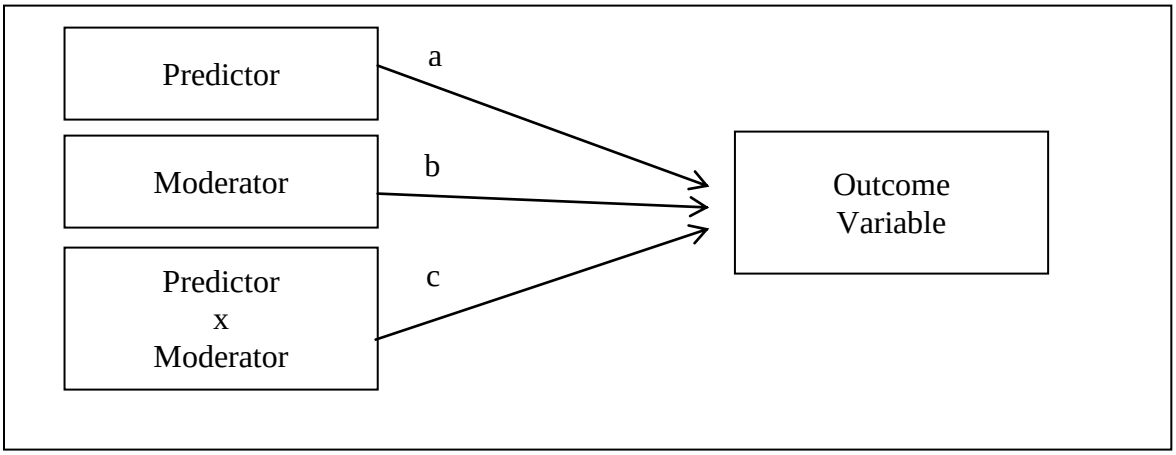

Figure 3.2
Moderator Model
Source: Adapted by Baron and Kenny (1986)

Cohen and Levinthal (1989) argued that firms invest in R&D not only to directly pursue new process and product innovation, but also to develop and maintain their broader capabilities to assimilate and exploit externally available information. Cohen and Levinthal (1990) also indicated that the firms' absorptive capacities depend on those of their employees, experience, and training which have a positive influence on firms' level of absorptive capacity.

Zahra and George (2002a) established that acquiring and assimilating knowledge from external sources would influence the firm's ability or potential to create and organise the knowledge necessary to build other organisational capabilities. Todorova and Durisin

(2007) signified that internal power relationships have affected assimilation phases of new knowledge exploitation. This in turn would affect whether individuals are willing to share knowledge and eventually participate in leveraging organisational absorptive capacity. More attention on its gatekeeper would motivate people to share knowledge rather than rewarding individual 'superstar' ideas (Cohen & Levinthal, 1987; Cohen & Levinthal, 1990).

If absorptive capacity is to be something for everyone within the organisation, everyone would have to have a chance to make a difference. There is a need for the employee to follow in the footsteps of Japanese quality oriented production logics, such as Kaizen (Imai, 1986) for continuous improvement (Boer, Berger, Chapman, & Gertsen, 2000) and high-involvement in innovation (Bessant, 2003). All these approaches communicate that everyone in an organisation is capable of possessing the skills and abilities that underpin innovation (Tidd & Bessant, 2009).

Recent research by Grant and Baden-Fuller (2004), and Lichtenthaler and Ernst (2009) found evidence that the main reason behind many inter-organisational relations is to gain access to external knowledge and there is not always immediate inward knowledge transfer. The company retains knowledge externally (Dhanaraj, Lyles, Steensma, & Tihanyi, 2004) in inter-firm networks until it is ready and needs to be absorbed internally (Lichtenthaler, 2008). Marsh and Stock (2006) highlighted that it would be inefficient for a firm to generate new knowledge continually even while at the same time, they can utilise knowledge from their networks.

Therefore, the stakeholders need to work on networking competencies and retain relationships which help retain knowledge during the provision of financial and non-financial support by the government in activities of the company. The knowledge processes, which facilitate the acquisition, assimilation, transformation, and exploitation of knowledge build up, would manage knowledge in inter-firm relationships over time, as a relative and connective capacity (Lichtenthaler & Lichtenthaler, 2009).

Innovative processes and technologies would enable customers to significantly differentiate brands among players in the market. Companies have to compete for increasingly scarce human resources. To compete for resources and manage fallout of increasing wage costs, manufacturing companies need to improve efficiency, margins, and product differentiation through innovation. Considering the significant roles of SMEs to the economic development of Malaysia, the government has provided a number of business support programmes to ensure their competitiveness (Yusoff & Yaacob, 2010).

3.2.4 Dependent Variables (SME performance)

The dependent variable is the variable of primary interest to the researcher. It is a goal of understanding for explaining the prediction of any studies (Sekaran & Bougie, 2010). The analysis could possibly find answers or solutions to the problem. For this purpose, this researcher was initially interested in measuring SME performance.

However, performance is a complicated notion in terms of definition and measurement (Keats & Bracker, 1988; Denan, 2008). It has been recognised as a crucial element

(Sharma, Bhagwat, & Dangayach, 2005) to support decision making of the organisation (Neely *et al.*, 2002). According to Jarvis *et al.* (2000), SMEs focus their attention and efforts exclusively on the financial perspective in terms of performance measures on the cash flow matter, where this is especially so among manufacturing SMEs (Webb, Greatbanks, & Hough, 1999). Murphy *et al*. (1996) revealed that the vast majority of studies considered measures only relating to the financial aspect and it is also considered to be a critical dimension of performance (Jamil & Mohamed, 2011; Keegan, Eiler, & Jones, 1989).

However, by focusing efforts exclusively on the financial perspective, it introduces significant disadvantages, such as the fact that this indicator often leads to inhibit, rather than facilitate, the achievement of established objectives (Hudson & Smith, 2000). According to the Venkatraman and Ramanujam (1987), performance measures that are classified as either financial or operational would underline the importance of all major businesses in evaluating and modifying performance measures, in order to adapt to the rapidly changing and highly competitive business environment (Kennerley & Neely, 2002; Eccles, 1991).

Moreover, measuring SME performance is an important tool to evaluate the effectiveness of a firm's strategy (Denan, 2008). Derived from these, performance of the company would show how efficient and effective is the GBSS toward absorptive capacity as a moderator. Therefore, for this study, this researcher hypothesised that:

H_3 : There is a moderating effect of organisational absorptive capacity on the relationship between GBSS on financial support, non-financial support, and SME performance.

3.3 Research Design

Research design is defined as the plan and structure of investigation to obtain answers to the research questions and the plan is the overall scheme or programme of the research (Cooper & Schindler, 2011; Cooper & Schindler, 2008; Cooper & Schindler, 1998). As a framework for a study, it is used as a guide for data collection and analysis (Sekaran & Bougie, 2010). It includes the approach employed in data collection and techniques used to measure the relationship among variables for further explanation, prediction, and management.

The purpose of this study aimed to examine the relationships between GBSS as the independent and SME performance as the dependent variables. This study also included absorptive capacity as a moderating variable. Therefore, this procedural framework would further explain the type of study, unit of analysis, time horizon, population, sample size, and sampling technique in particular (Amaratunga& Baldry, 2002).

3.3.1 Type of Study

A quantitative research approach was chosen for this study as it is an excellent way of finalising results and proving or disproving a hypothesis. Quantitative approach places a considerable trust in numbers that represent opinions or concepts (Amaratunga & Baldry, 2002). It is useful to draw a representative sample from the population.

Therefore, the results of studying the sample can then be generalised back to the population (Marshall, 1996).

3.3.2 Time Horizon

A cross-sectional survey method was used to conduct this study as specified by Sekaran and Bougie (2010). It is helpful and relatively fast, since conducting a one-shot study research would yield results that can be projected on the whole population (Zikmund, 1997), provided the sampling technique is done randomly (Cooper & Schindler, 2011). In a random sample, the nature of the population is defined and all members have an equal chance of being selected (Marshall, 1996).

3.3.3 Population

Population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran & Bougie, 2010) and make some inferences (Cooper, 1998; Cooper & Schindler, 2011). As of 25 January 2013, there were 2,335 northern manufacturing SMEs listed in SME Corp. Malaysia database (Table 3.2).

The unit of analysis can be individual, group, or organisation depending upon the nature and context of the study (McDougall & Oviatt, 2000). For this study, the SME firm is taken as unit of analysis. Therefore, researcher received response from OMs or managers only because they have been perceived to have knowledge about their operations. As the key person that makes most of the key decisions (Ahmad, Ramayah, Wilson, & Kummerow, 2010; Ismail, 2009), their actions could determine the survival of their companies.

Table 3.2
The Summary of Manufacturing Industry in Northern Peninsular Malaysia

No.	Industry Group	Perlis	Kedah	Penang	Perak	Total
1	Food and Beverage	30	187	304	205	726
2	Manufacturing Related Services	3	40	114	34	191
3	Paper and Printing	3	38	108	24	173
4	Plastic	0	37	110	57	204
5	Rubber	1	25	52	31	109
6	Textile, Apparel and Leather	1	54	50	39	144
7	Wood and Woods	1	35	44	48	128
8	Miscellaneous	3	47	140	54	244
9	Metal	0	46	212	85	343
10	Non-Metallic mineral	0	8	18	47	73
	TOTAL	**42**	**517**	**1, 152**	**624**	**2, 335**

Source: SME Corporation (2013)

3.3.4 Sample Size

Krejcie and Morgan (1970) established a table for determining sample size, which was applied in this study to obtain an appropriate sample for this study (Sekaran & Bougie, 2010; Sekaran, 2003). The population of a sample size under manufacturing SMEs located at Northern Peninsular of West Malaysia was 2,335 by using simple random sampling. According to Krejcie and Morgan (1970), if the population, N is 2,400 SMEs, then, the sufficient sample size would be 330. It is also supported by estimating using the formula given by Mendenhall, Reinmuth, and Beaver (1993) and Mendenhall, Wackerly, and Scheaffer (1998) (refer to Appendix 2). This sample is large enough for random selection. However, after using purposive sampling, the sample size for this study was only 150 respondents. As indicated by Hair et al. (2006), a sample size with minimum of 100 should be sufficient enough to generalise the results to the whole population.

3.3.5 Sampling Design

In this research, there were two phases of sampling design, which are as follows:

1. First Phase – Determining Sample Size

Probability sampling technique was used to select the number of sample SMEs that are spread across Malaysia only. According to the database used in this study provided by the Economic Consensus (2011), there are 645,136 SMEs established in Malaysia where 37,861 SMEs in the manufacturing sector as mentioned in Table 2.6. However, only 9,547 manufacturing SMEs operated in Northern Peninsular of West Malaysia northern region, which include the states of Perlis, Kedah, Penang, and Perak (Table 2.9). Then, a random number table was used to determine the subjects where the researcher had choose the quantity of random number desired, with the maximum and minimum values of numbers can be selected without replacement (Sekaran & Bougie, 2010). The researcher applied simple random sampling technique on the master list provided by SME Corp. Malaysia database.

From the 9,547 identified SMEs, the researcher narrowed down the population in accordance with two criteria, which are SMEs that do not exceed 150 full-time employees and SMEs that receive GBSS from agencies in the form of either financial or non-financial support. Therefore, only 2,335 SME firms in manufacturing and manufacturing related sectors were selected, as listed in Table 3.2. By generalising the entire sample through this random selection, it would ensure that respondents in the defined population have a zero chance of getting selected as stated by Cooper &

Schindler (2011). Based on the 2,335 populations, the researcher distributed the questionnaire set to 330 SMEs.

2. Second Phase – Data Collection

Purposive sampling was used for data collection. This sampling technique is applicable for non-probability sampling where units of investigation are based on the judgment of the researcher. From the first phase of the sampling design, there were a total of 330 of potential respondents that the researcher self-administered a questionnaire set. Then, the researcher used purposive sampling on different events (further discussed in Section 3.8) to determine the sample size. Based on four judgments, namely (1) SMEs operating in northern region of Peninsular Malaysia, (2) manufacturing and manufacturing related sectors, (3) SMEs that do not exceed 150 full-time employees, and (4) SMEs that receive GBSS from agencies in the form of either financial or non-financial support, the sample size for this research was reduced from 330 to 150 SMEs.

3.4 Questionnaire Development

Survey data can be gathered in several ways. For example, through the use of questionnaires, interviews, and also telephone surveys. In this study, a questionnaire set is used to gather all the relevant data that helps to determine the degree of performance among SMEs that receive assistance from the government. It also examines the moderating effect of organisational absorptive capacity between GBSS and SME performance.

After an extensive review of the literature, the questionnaire items were stated in English and Malay languages (refer to Appendix 3). For an effective data collection mechanism when the researcher wants to measure the variables of interest, the length of the questionnaire needs to be relatively short in order to avoid transient mood states, such as boredom and fatigue (Lindel & Whitney, 2001). The relative length of questionnaire also would facilitate the respondents to complete the survey between 10 to 15 minutes.

In this study, the length of questionnaire was kept short as recommended by Horst (1968) and Oppenheim (1986).Each questionnaire item did not exceed 20 words, or exceed one full line in print. The final version of the survey questionnaire contained eight pages with 37 items distributed into four sub-dimensions, namely as:

1. Demographic Characteristics (01D1 until 08D8)
2. Government Business Support Service (09BS1 until 19BS11)
3. Organisational Absorptive Capacity (20AC1 until 26AC7)
4. SME performance (27P1 until 37P11)

The first section captures the demographic data, including position of respondent that answers the question of being either OM or manager, number of employees under employment (full time and part time workers), and number of years the business had been in operation. This researcher also wanted to indicate how the company actually started the business, which assistance had been received by the company, and also an indication of which programmes highly affect the company performance. This

researcher also wanted to study which programmes based on SME Development Programmes by SME Corp. Malaysia benefited the most to the SME companies.

The next three sections describe several questions related to independent and dependent variables. The multiple choice answer was given in the survey form. This would allow more accurate answers from the respondents who might not want to disclose the exact information. For this study, a modified version of quantitative multisite research design was used. This adaptation is applicable for the study and suits in identifying current trends. For this purpose, only related items on all variables were used to look at the relationship.

Table 3.3
Variables and Measurement Scale

Variable	Measurement Scale	Source
Government Business Support Service	Scale BS	Mathibe (2010), Abdullah & Ab Manan (2011), Miller *et al*. (2011), Farinda, Kamarulzaman, Abdullah, & Ahmad (2009), Ismail(2009)
Organisational Absorptive Capacity	Scale AC	Wang & Han(2011)
SME performance	Scale P	Mohd Rosli, Kuswantoro, & Che Omar (2012)

The second section of the survey questionnaire was based on Government Business Support Services (GBSS). In this section, the respondents were asked about their opinion on GBSS in Malaysia and also assistance through financial and non-financial support from the government.

The third section is about organisational absorptive capacity. In this section, the respondents were asked about how the company can absorb knowledge after receiving some support from the government.

The last part explores the outcome of government support on SME performance. In order to measure this section, this researcher asked for a response on how the company performance was after receiving GBSS.

Table 3.4
Distribution of Items

Dimensions	Item number
Demographic characteristic	01D1, 02D2, 03D3, 04D4, 05D5, 06D6, 07D7, 08D8
Government Business Support Service	09BS1, 10BS2, 11BS3, 12BS4, 13BS5, 14BS6, 15BS7, 16BS8, 17BS9, 18BS10, 19BS11
Organisational Absorptive Capacity	20AC1, 21AC2, 22AC3, 23AC4, 24AC5, 25AC6, 26AC7
SME performance	27P1, 28P2, 29P3, 30P4, 31P5, 32P6, 33P7, 34P8, 35P9, 36P10, 37P11

A five-point Likert scale was used in these sections (Section B: Government Business Support Service, Section C: Organisational Absorptive Capacity, and Section D: SME performance) where respondents were required to evaluate their perception on each given item based on a scale from 1 (strongly disagree) to 5 (strongly agree), as in the following, 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

According to Coelho and Esteves (2006), a small number of points would not allow a good discrimination of responses because it would limit the ability to find significant differences between segments and also may limit the data analysis methods that can be used. However, in this research, this researcher considered that any response should depend on the involvement of respondents, the socio-demographic characteristics of respondents, and also the nature of data collection methods.

Also, with odd number of response alternatives, this researcher contended that the middle point is used by the respondents that prefer to reduce the response effort. Based on research by Coelho and Esteves (2006), a five-point scale tends to show a higher interaction response to the middle point of scale. Hence, a respondent who does not have an opinion or experience with regard to specific attributes will respond with "no experience" instead of being indifferent. For this reason, respondents should have at least a slightly positive or slightly negative attitude toward the evaluated attribute.

In another study, a five-point scale also was found to be adequate for measuring the individual items in the case of subject-centred scales (Cox, 1980). Cox (1980) reviewed 80 years of literature on the optimal number of response rating scale, and concluded that an odd rather than an even number of response point in a rating scale is preferable under circumstances in which the respondent can legitimately choose a neutral position (for example: neither agree nor disagree, or no opinion). On the other hand, a five-scale is easier and more feasible to observe and applicable for this research (Hair, Babin, Money, & Samouel, 2003).

3.4.1 Government Business Support Services

Based on some literature, this dissertation had attempted to focus on financial and non-financial support that is provided by SME Corp. in classifying the measurement of GBSS.

The GBSS measurement was adapted from the results of the work performed by Mathibe (2010) in study on evaluating business support service in Free State, South Africa (items 09BS1 until 12BS4, and item 17BS9). To measure financial support by the government, the measurement scales for financial support by the government were adapted from Abdullah and Ab Manan (2011), since other scholars also studied the financing pattern used by Malaysian SMEs (items 13BS5 until 15BS7).

For non-financial support, this researcher measured networking support that was adapted from Farinda *et al.* (2009), seeing as scholars revised values of building a social business networking within Malaysian SMEs (item 18BS10). In addition, this researcher also adapted a research by Miller *et al.* (2011) which showed that maintaining network relationships can significantly aid the development and retention of knowledge (item 16BS8). This researcher also wanted to measure the technology support by the government, which was adapted from Ismail (2009), as previous scholars studied the factor external experts' influences effectiveness of information system in Malaysian SMEs (item 19BS11).

This researcher had modified items to address the concern about the need to adapt measures according to the research context and tested them in this study based on types

of grant support by SME Corp. The measurement scales were of the five-point Likert-type scales and are presented in Table 3.5.

Table 3.5
Questionnaire: Items for Government Business Support Services

Item	Original Version	Adapted Version	Adapted From
09BS1	The government is doing enough to help entrepreneurial business in Free State.	**Based on the assistance provided,** the government is doing enough to help entrepreneurial business in **Malaysia.**	Mathibe (2010)
10BS2	There are too many policies that are barriers for entrepreneurial business to start doing business.	**Based on the assistance provided,** there are too many **terms and conditions to be complied before the loan being approved.**	Mathibe (2010)
11BS3	The professionalism of the person who handled your application?	**Based on the assistance provided, it is easy to deal with person / officer** who handled the application.	Mathibe (2010)
12BS4	Communicating after receiving your loan amount?	**Based on the assistance provided, there is no follow up after received any assistance.**	Mathibe (2010)
13BS5	High access to financing due to various guarantee schemes by government.	**Based on the assistance provided, there is** high access to financing due to various guarantee schemes by government.	Abdullah & Ab Manan (2011)
14BS6	Easy to apply new loan.	**Based on the assistance provided, it is hard for my company to apply the following new loan after getting the first loan.**	Abdullah & Ab Manan (2011)
15BS7	Rely more on short term loan.	**Based on the assistance provided, the company** rely more on short term loan **for company development**.	Abdullah & Ab Manan (2011)
16BS8	We can learn new thing effortlessly.	**Based on the assistance provided, the company could exchange new ideas, experience and knowledge if attending seminar / workshop organised by the government.**	Miller, *et al.* (2011)

17BS9	The quality of a mentorship programme to help make your business sustainable.	**Based on the assistance provided, the quality of a mentorship programme helps to make company sustainable.**	Mathibe (2010)
18BS10	Sharing knowledge increase production.	**Based on the assistance provided, sharing knowledge among participants in the same industry increase my company production.**	Farinda *et al.* (2009)
19BS11	Right technology meet company needs.	**Based on the assistance provided, the technology received did not meet company needs.**	Ismail (2009)

3.4.2 Organisational Absorptive Capacity

Zahra and George (2002a) looked into the concept of absorptive capacity as a set of organisational routines and processes, by which firms acquire, assimilate, transform, and exploit knowledge. In this study, organisational absorptive capacity was based on the scale develop by Wang and Han (2011). This study only measured acquisition and assimilation (Zahra & George, 2002b), since the objective is finding out how much potential can a company gain after receiving GBSS (seven items: 20AC1-26AC7). These questions were originally based on moderating effects toward innovative performance on manufacturing SMEs in China. However, it was modified to fit the context of Malaysian SMEs and organisational absorptive capacity. All of these scales were measured by five-point Likert-type scales and illustrates the seven items for organisational absorptive capacity variable, as shown in Table 3.6.

Table 3.6
Questionnaire: Items for Organisational Absorptive Capacity

Item	Original Version	Adapted Version	Adapted From
20AC1	Enhancing knowledge and technology in manufacturing process	**Services provided assistance in** enhancing knowledge and technology in manufacturing process	Wang & Han (2011)
21AC2	Improvement in acquiring knowledge management.	**Services provided assistance in** improvement in acquiring knowledge management.	Wang & Han (2011)
22AC3	Forming appropriate action to the needs of the company.	**Services provided assistance in** forming appropriate action to the needs of the company.	Wang & Han (2011)
23AC4	Absorbing external knowledge for increasing company capabilities.	**Services provided assistance in** absorbing external knowledge for increasing company capabilities.	Wang & Han (2011)
24AC5	Enhancing acquisition and assimilation capacity towards tacit knowledge.	**Services provided assistance in** enhancing acquisition and assimilation capacity towards tacit knowledge.	Wang & Han (2011)
25AC6	Enhancing acquisition and assimilation capacity towards new knowledge.	**Services provided assistance in** enhancing acquisition and assimilation capacity towards new knowledge.	Wang & Han (2011)
26AC7	Ability to absorb external knowledge	**Services provided assistance in** ability to absorb external knowledge	Wang & Han (2011)

3.4.3 SME performance

In this study, performance of the company was based on the scale developed by Mohd Rosli *et al.* (2012), which measured organisational and market performances. Items for the former included returns on assets, returns on sales, employment growth, labour productivity; whilst the latter comprised the items on sales revenue growth, profitability, market share, customer satisfaction, and customer loyalty. The questions were originally based on a comparison of company performance between Indonesia and Malaysia. However, it was modified to fit the context of Malaysian SMEs alone. All of these scales were measured by five-point Likert-type scales, which were modified from the work by

Mohd Rosli *et al.* (2012) where they used seven-point Likert-type scales (1 = strongly disagree to 7 = strongly agree). Table 3.7 illustrates the 11 items for performance of the company variable.

Table 3.7
Questionnaire: Items for SME performance

Item	Original Version	Adapted Version	Adapted From
27P1	Growth in sales revenue.	**The company has increased on** growth in sales revenue.	Mohd Rosli *et al.* (2012)
28P2	Profitability.	**The company has increased on** profitability.	Mohd Rosli *et al.* (2012)
29P3	Return on asset.	**The company has increased on** return on asset.	Mohd Rosli *et al.* (2012)
30P4	Return on sales.	**The company has increased on** return on sales.	Mohd Rosli *et al.* (2012)
31P5	Market share.	**The company has increased on** market share.	Mohd Rosli *et al.* (2012)
32P6	Labour productivity.	**The company has increased on** labour productivity.	Mohd Rosli *et al.* (2012)
33P7	Level of customer satisfaction.	**The company has increased on** level of customer satisfaction.	Mohd Rosli *et al.* (2012)
34P8	Overall financial performance.	**The company has increased on** overall financial performance.	Mohd Rosli *et al.* (2012)
35P9	Level of customer loyalty.	**The company has increased on** level of customer loyalty.	Mohd Rosli *et al.* (2012)
36P10	Growth of worker.	**The company has increased on growth of machine.**	Mohd Rosli *et al.* (2012)
37P11	For further explanation, researcher will ask for respondent permission either they want to be interviewed or not.		

3.5 Data Collection Administration

Correspondingly, data must be acquired in order to accept or reject any hypothesis that has been established before. Therefore, this researcher used the survey research for this purpose. In order to complete this study, two types of data namely primary and secondary data were gathered as the sources.

3.5.1 Primary Data

According to Sekaran (2003), primary data is defined as data gathered for research from the actual situation where the events are occurring. In this study, self-administered questionnaires were used, where the researcher personally distributed the instrument to the respondents and collected the responses. As a result, there were 150 respondents that provided feedback used as primary data for this study.

3.5.2 Secondary Data

In this study, secondary data is the external data and sources that were taken from printed materials, or in other words, readily available data, such as books, journals, magazines, case studies, and electronic materials, like the Internet, official websites, and others. The data about GBSS and SME performances were collected from local and international literature.

Furthermore, the SME Corp. Malaysia Annual Report also was studied to get more in depth information about the subject under study. Both local and international literature works were also reviewed primarily to have better understanding about the pertinent issues and challenges faced by SMEs and the government. This data helped this

researcher in terms of time, efficiency on cost, and also provide a basis for comparison of the data that were collected by previous studies. Then, the findings would be discussed further in relation to the local environments.

3.6 Measurement Validity and Reliability

This section addresses the analysis employed for the establishment of reliability and validity of measures. In order to explore the relationship between variables, this researcher considered estimating the extent of validity and reliability for each of the instruments used in this research. Validity and reliability are two different concepts but highly related. Thus, all tests were carried out and described in the following sections.

3.6.1 Validity

Validity refers to the extent or ability of a scale to which a measurement tool actually measures the construct that is used to measure. The instrument included a point of awareness, attitude, and opinion of the sampling unit (Hair, Black, Babin, Anderson, & Tatham, 2006; Sekaran & Bougie, 2010) with the actual reality (Neuman, 2003). Validity test would ensure that a scale conforms to its conceptual definition. There are three aspects of validity which were applicable in this study, namely (1) content validity, (2) face validity, and (3) construct validity.

3.6.1.1 Content Validity

Content validity specifies that the authorities appear to differ in their views on features of measurement, established content, or information needed for the study. If the sample is appropriate and the items match, the measure has content validity (Churchill, 1979).

In this research, once the items were generated, a panel of experts was asked to review them (Grant & Davis, 1997). This researcher used a technique of judgment, panel evaluation, and content validity. In this study, content validity was evaluated by the people in charge for SME Corp. in Kedah, Perlis, Perak, and Penang. After attending the appointments, this researcher identified recommendations, elements of assessment instrument that required refinement and items that should be omitted (Haynes *et al.*, 1995).

3.6.1.2 Face Validity

Face validity is a test of internal validity of the items by untrained individuals where the judgment is based on whether the items are relevant. It is a qualitative measure and not quantified with statistical methods. Subjectively, face validity assesses the correspondent between individual items and the concepts through ratings by expert validation and the instrument measure. Informally, the objective is to ensure that the selection of scale items extends past just empirical issues to also include theoretical and practical consideration. In this case, this researcher had set up appointments with selected SMEs, asking them to complete the questionnaire set and obtaining their recommendation.

3.6.1.3 Construct Validity

Construct validity is concerned with the degree to which a scale measures the construct it is designed to measure. It was assessed through the convergence and divergence of the scales (Cooper & Schindler, 2000). In this study, within-scale factor analysis was used to test whether all items in the scale load fall on a common factor.

3.6.2 Reliability

Reliability is the degree to which measures are free from random error and therefore yield consistent results. According to Cronbach (1951), the alpha coefficient is one of a reliability test that measures the proportion of the scale's total variance that is attributable to a common source and free from error (Peter, 1979). In addition, coefficient alpha was utilised because it is the most notable measure for reliability studies in social sciences. Cronbach's Alpha (α) indicates how well the items in a set are positively correlated to one another. The scales used helped to ensure that this research was free of random or unstable errors, and produced consistent results over time (Cooper & Schindler, 2006). Therefore, for internal consistency, Cronbach's Alpha was used to measure that the instrument items were homogeneous, consistent, and reflects the same underlying constructs.

Preferably, reliabilities less than 0.6 are generally considered to be poor, those in the range 0.7 are to be accepted, and those over 0.8 to be good (Sekaran, 2003; Hair, Anderson, Tatham, & Black, 1995; Sekaran & Bougie, 2010), when the reliability coefficient can reach a maximum value of 1.0. The items with low reliability alpha which is less than 0.5 should be dropped (Cortina, 1993). To sum up, the Cronbach's alpha (α) can be fixed through following the rules-of-thumb proposed by George and Mallery (2003):

In this dissertation, this researcher maintained the scale of at least 0.7 as suggested by previous prominent scholars (Hair *et al.*, 1995; George & Mallery, 2003; Sekaran & Bougie, 2010).

Table 3.8
Rules of Thumb Proposed by George and Mallery (2003)

Range	Interpretation
$\alpha > 0.9$	Excellent
$\alpha > 0.8$	Good
$\alpha > 0.7$	Acceptable
$\alpha > 0.6$	Questionable
$\alpha > 0.5$	Poor
$\alpha < 0.5$	Unacceptable

3.7 Pilot Test

A pilot test was carried out to ensure the reliability of the instrument. The main purpose of a pilot test is to catch potential problems regarding wording or the measurements before they become costly mistakes (Cooper & Schindler, 2006). A pilot study is very useful for detecting any design and instrumentation deficiencies. A questionnaire is considered reliable if its repeated application results in consistent scores. Therefore, the pilot study performed for this study assisted in identifying misunderstood items, ambiguous terms, and useless items. In addition, reliability test was conducted to ensure the reliability of each questionnaire items.

A pilot test should be a minimum of 30 respondents and considered appropriate for the research (Roscoe, 1975; Sekaran, 2003). Therefore, the reliability test was conducted on 33 earlier companies to know how reliable all the items in the questionnaire has been understood for the respondent.

Results of the pilot test for this research which covered all variables for 33 respondents had shown reliability values of above 0.70 to 0.80, as shown in Table 3.9, thus proving acceptance of the reliability coefficient test. Based on Nunnally (1978) and Hair *et al.*

(1995), the items of each construct in the questionnaire were considered reliable or have an internal consistency, thus the research could proceed to the next stage of analysis.

Table 3.9
Reliability Coefficients for the Major Variables

Variable	No. of items	Items dropped	Cronbach Alpha
Financial Support by the Government	3	-	0.763
Non-Financial Support by the Government	4	-	0.768
Absorptive Capacity	7	-	0.857
SME performance	10	-	0.895

3.8 Data Collection

This study required manufacturing SMEs to respond to a questionnaire set. Thus, the questionnaire was self-administered to 330 out of 2,335 manufacturing SMEs located in the Northern States of West Peninsular Malaysia. The data collection process was conducted by the researcher from April to May 2013.

Introductory covers letter and the survey questionnaires (Appendix 3) were distributed to 330 SMEs according to events as listed in Table 3.10. Because of the associated difficulties in obtaining the cooperation of SME companies in revealing their data (Ackah & Vuvor, 2011), one main contributing factor toward facilitating data collection for this study has been the researcher's characteristics, namely position and experience.

As a senior assistant manager in Penang Development Corporation (PDC) with over 20 years of work experience, this researcher has knowledge and access to the events listed in Table 3.10 in order to be able to identify and take advantage of the most strategic times and places to collect data. Previously, this researcher was appointed in

Entrepreneur Development Division for more than six years and had experienced in dealing and handling SME events.

Table 3.10
Total Respondents According to Event

No.	Date (2013)	Location	Event	Total Distributed	Total Received
1	April	Kedah	Appointment with SMEs	4	4
2	April	Penang	Penang International Halal Exhibition and Conference (PIHEC)	18	15
3	3 April	KLCC	MIHAS – 10th International Halal Showcase	35	9
4	15 April	Traders Hotel, Penang	Conference on the 10th China-ASEAN Expo (CAEXPO) 2013	40	8
5	18 April	Ixora Hotel, Penang	Export Trade Disputes (MATRADE)	55	16
6	19-20 April	Rainbow Paradise Hotel, Penang	Business Coaching (PKNK – KTPC)	30	15
7	April	Penang	Business Coaching (PKNK – KTPC)	30	16
8	24 April	MPC, Penang	On-line Business Workshop: Packaging and Branding Workshop	60	26
9	24-25 April	Kedah	SME Mentoring Workshop (SME Corp. – Nestle – HDC)	28	11
10	May	Kedah	Appointment with SMEs	30	30
			Total	**330**	**150**

Therefore, this researcher has a close relationship with SME Corp. Malaysia, together with related agencies, and personally administered the questionnaires in the events to respondents listed in SME Corp. Malaysia database, among which include respondents

actively participating in programmes conducted by SME Corp. Malaysia or related agencies.

From the total of 330 questionnaires distributed, there were only 150 questionnaires that fulfilled the requirements as discussed in Section 3.3.5. Therefore, the returned yielding is 100% usable response rate. Table 3.11 illustrates the response rate of this study.

Table 3.11
Response Rate

No.	Items	Response
1	Total number of distributed questionnaires	330
2	Total number fulfilling the requirements	150
3	Total number of usable responses	150
4	Percentage of usable responses [No. 2 / No. 3] x 100	**100%**

3.9 Data Analysis Techniques

Once the data were collected, data were entered into a computer data file using the 'Statistical Package for Social Science' (SPSS/PC+ 19.0) for Windows or better known as SPSS. It also organised and presented the data in a way that facilitates interpretation and analysis. The data were computed and recorded using the range into same variables.

SPSS produce outcomes at the click of the mouse. It is very easy to produce outputs that look impressive but could be meaningless. It is very important to give adequate attention to the theoretical framework of the research where the researcher can draw appropriate conclusions from the research (Sekaran, 2003; Sekaran & Bougie, 2010). Therefore, this study employed a number of techniques for data analysis where it began with data

screening and data cleaning in order to deal with missing values, remove influential outliers, and make the data normal. Then, the data was analysed, as explained in the following sections.

3.9.1 Descriptive Analysis

A descriptive analysis was taken to understand the characteristics of the respondents involved with the variables of interest in the situation, as it is the analysis that describes the phenomena of interest (Sekaran & Bougie, 2010; Sekaran, 2003). Descriptive analysis was used to determine the basic characteristics of demographic factors and to check violation of the assumptions made by the individual test in relation to the variables. Besides, descriptive statistics include the means, standard deviations, range of scores for the dependent and independent variables, skewedness, and kurtosis involved in this set of statistical tests. The major concern of this analysis is to present information in a convenient, usable, and understandable form (Abdullah, 2010; Runyon & Haber, 1980). It also used to screen the data set (Hair *et al.*, 1995).

3.9.2 Factor Analysis

Next, the technique for testing goodness of measure was factor analysis, as suggested by Sekaran (2003). Kaiser-Meyer-Olkin (KMO) and Bartlett's Test was conducted in order to verify the factorability of the data. KMO measures sampling adequacy to estimate the amount of variance within the data that could be explained by factors. Kaiser (1974) recommended values greater than 0.5 as acceptable, where the researcher does not have to either re-collect more data or rethink which variables to include in the research. For factor analysis to work, there is a need for some relationships to exist between variables

and if the R-matrix is an identity matrix, then all correlation coefficients would be zero (p<0.001) (Kaiser, 1960). Therefore, factor analysis is appropriate for use in this study in order to complete the study objectives.

3.9.3 Correlation Analysis

Then, correlation analysis was conducted to show the strength or the degree of relationship of between two types of variables, which are dependent variable and independent variables. It serves as an early stage of investigation into the accuracy of the hypotheses model. From the correlation results, the degree of relationship can be testified as cited by Davis (1997), who suggested five types of relationships, as shown below:

Table 3.12
Davis Scale Model

Range	Definition
0.70 and above	Very strong relationship
0.50 – 0.69	Strong relationship
0.30 – 0.49	Moderate relationship
0.10 – 0.29	Low relationship
0.01 – 0.09	Very low relationship

It measures a linear relationship between two attributes or columns of data. Therefore, the coefficient of the correlations can range between -1.0 and +1.0, and such value shows the strength of the relationship which has been categorised into high, low, or moderate depending on the value of correlation coefficient. When Pearson's r is close to

1, there is a strong relationship between two variables and when r close to 0, there is a weak relationship.

Due to nature of this study, correlation analysis was conducted using the one-tailed test to find out the existence of any relationship with specific direction between independent variable and dependent variables, as questioned by the hypotheses (H_1 and H_2).

3.9.4 Regression Analysis

3.9.4.1 Standard Regression Analysis

Regression analysis is a technique for measuring linear association and in this study it was used to predict value between the dependent variables and the independent variable. This technique has the ability to identify any significant relationships between the dependent variables and the independent variable (Sekaran & Bougie, 2013). Therefore, standard regression analysis used to reinforce the study findings after using correlation analysis to test the hypotheses (H_1 and H_2).

3.9.4.2 Hierarchical Regression Analysis

In this study, the hierarchical regression analysis was used to test hypotheses H_3. All independent variables were entered into the equation at once in order to examine the relationship between the whole set of variables proposed by Baron and Kenny (1986). This statistical technique is used to find relationships between variables for the purpose of predicting future values. From this first regression, the researcher has the variance accounted for related to this corresponding group of independent variables. The researcher would then run another multiple regression analysis while including the

original independent variables and a new set of independent variables. This would allow this researcher to examine the contribution above and beyond the first group of independent variables.

Basically, the analysis starts with descriptive statistical analysis to ensure that the value of the Pearson correlation coefficients between every pair of variables is acceptable. As an output of this step, a table of means and standard deviation for all variables for 150 respondents is created.

Next, regression model summary shows outcome and predictor for the three models. According to Baron and Kenny (1986), a three-step hierarchical regression was utilised as follows:

1. in the first step, the direct effect of the independent variables was gauged,
2. in the second step, the moderator variable was entered to gauge whether the moderator has a significant direct impact on the dependent variable, and
3. in the third step, the moderator effect must show significant R^2 increase with a significant F-Change Value.

There is a moderation effect once there is an observable significant R^2 increase. Another important criterion is the amount of additional variance explained by the interaction terms. Sig. F change indicates if R^2 change is sufficient, and the *p*-value should be less than 0.05 to be significant. Therefore, there is an indication of moderation effects in the investigated relationship.

Then this researcher proceeded with plotting line graphs to see how the moderator has changed the relationship. Independent variable and moderator is continuous and the plot cannot be done. Therefore, the standard value was used to re-categorise into the levels based on two levels (1=Low, 2=Highest) and using median of the variables. The Beta values in the third step cannot be interpreted because there is a lot of multicollinearity when the independent variable and the interactions are put together. Therefore, the graphs are plotted to see the moderating effects.

3.10 Summary

This chapter summarised the research design and methodology that were used in this study. All the important aspects such as the population, sample, survey instrument development, and data analysis were discussed for framing a broad and general picture for this research process. Additionally, the pilot test was carried out and the instruments were found to be reliable for this study. Findings from the data analysis will be discussed next.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The objective of this chapter is to discuss the data analysis process and the findings of this study. It basically covers the profile of responding firms (Section 4.2), and the descriptive analysis of respondents' characteristics (Section 4.3). This is followed by the presentation of analysis results using correlation analysis (Section 4.4) and hierarchical regression (Section 4.5) to test the hypotheses of this study. Further elaboration on the hypotheses results (Section 4.6) is then offered, and finally the conclusion of this chapter (Section 4.7) is presented.

4.2 Data Screening and Cleaning Analysis

According to Hair et al. (2010), the data distribution and selected sample size have a direct impact on whatever choice of data analysis techniques and tests that is chosen. A series of data screening approaches, which included detection and treatment of missing data and outliers, were employed for this study. This was to establish the assumption of psychometric properties before applying necessary data analysis techniques.

In order to verify that the data ere clean and that there were no errors in the coding process, various procedures were carried out. The data was thoroughly screened to identify any errors in the coding process. Data for all items were filtered and frequency tests were performed to check the extreme minimum and maximum values. None of the values exceeded the specified range (1 to 5), which showed that there were no coding

errors. In addition, there were 150 complete responses with no missing values, thus all 150 respondents were accepted. As stated by Hair et al. (2010), if there is more than 50 per cent of the missing data for a given respondent, the case should be deleted, but for this study, no cases were omitted for further analysis in this study.

Linearity assessment shows that the linear relationship between variables is appropriate to conduct multivariate analysis. Linear assessment shows a linear relationship between variables through the scatter plots that can be conducted on all variables. The shape of the scatter plots and slope of the linearity line have been verified the linearity between variables, as exhibited in Figure 4.1 given below.

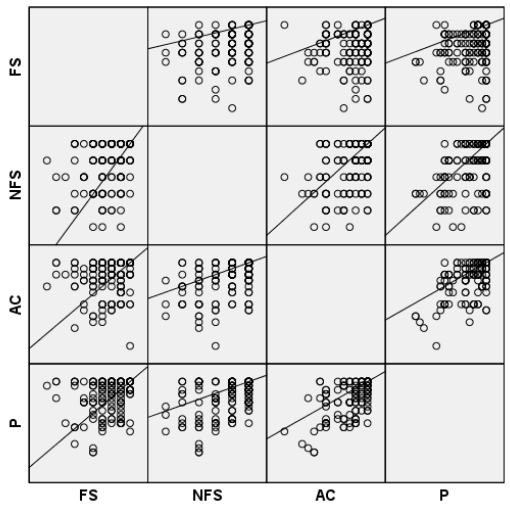

Figure 4.1
Scatter Plots of Variables

Normality assessment examines Skewness and Kurtosis values for all variables, revealing the indications of non-normality, since a few cases have Z-values exceeding the threshold values. The acceptable threshold statistical values (Z) for Skewness and

Kurtosis are < 3 and < 8 respectively (Hair et al., 2006). Table 4.1 shows Skewness values ranging from -0.887 to -1.158. Moreover, Kurtosis values ranged from -0.287 to 1.033, all of which showed that the variables were not excessively peaked. Thus, the values verified that the data comes from normal distribution.

Table 4.1
Skewness and Kurtosis Values

Variables	Mean	Std. Deviation	Skewness	Kurtosis
Financial Support	4.1978	0.63703	-0.987	0.973
Non-Financial Support	4.6867	0.34900	-0.887	-0.287
Absorptive Capacity	4.6390	0.42575	-1.266	1.033
SME Performance	4.6367	0.41940	-1.158	0.599

Table 4.2
Assessment of Multicollinearity

	Financial Support	Non-Financial Support	Absorptive Capacity	SME Performance
Financial Support	1.000			
Non-Financial Support	0.306	1.000		
Absorptive Capacity	0.082	0.442**	1.000	
SME Performance	0.169*	0.454**	0.602**	1.000

** Correlation is significant at the 0.01 level (1-tailed).

* Correlation is significant at the 0.05 level (1-tailed).

Meanwhile, multicollinearity refers to the higher degree of inter-correlations among independent variables and an impact of each variable which causes estimation of

independent variables. For this study, there is no issue of multicollinearity as the values of correlation coefficients ranged from 0.082 to 0.602 (Table 4.2), all of which were well below the upper threshold value of 0.90.

4.3 Profile of Responding Firms

The early part of the survey questionnaire covered the demographic background of the respondents. It consisted of position of the respondents, total number of employees under employment (according to full-time and part-time employee), number of years the company has operated, funding (to start and expand) for the business operation, assistance received from SME Corp. Malaysia, programmes that help SME performance, and also benefited programmes from SME Development Programme lists by SME Corp. Malaysia.

All respondent were OMs/managers from SME manufacturing and related services companies in the Northern Peninsular of West Malaysia. Basically, this researcher has met with each of the respondents when distributing the questionnaire during the events organised by SMEs and related agencies. Therefore, in this study, there are 150 respondents in the collected sample for data analysis. Respondents' background is tabulated in Table 4.4. Frequency distribution was obtained for all demographic characteristics and also for dependent and independent variables by using SPSS Version 19.0.

4.3.1 Current Position

From the total of 150 respondents, 59.1% or 88 respondents were owner managers and the balances of 61 respondents or 40.9% were managers.

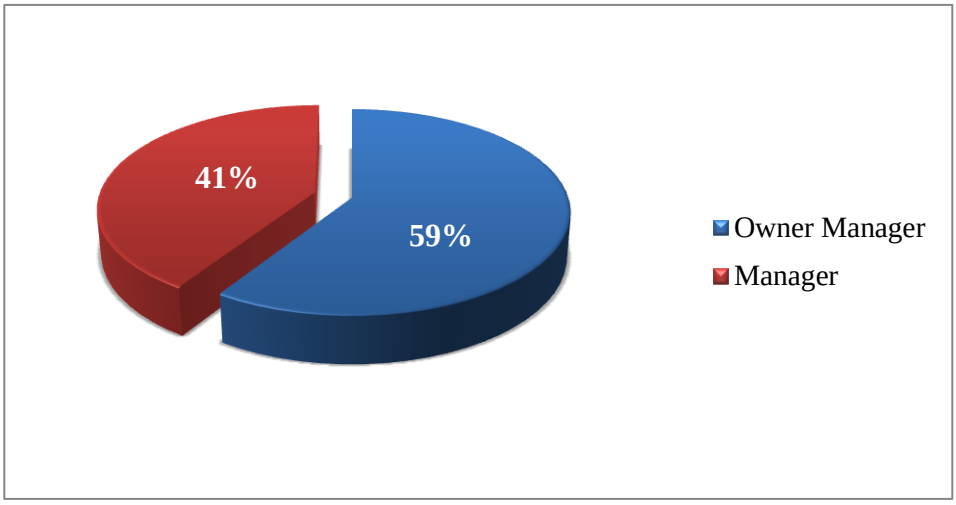

Figure 4.2

Percentage of Position of the Respondent

This finding suggested that 59% of SMEs were managed by OM. This is supported by Hashim (2005), where one of the main SMEs characteristic is that the management of the business is actually independent, where managers are also the owners. Research conducted by Abdullah and Ab Manan (2011) also found that most respondents were owners of the enterprises. Any decision regarding company sustainability can be made fast by OM (Hashim & Abdullah, 2002). Therefore, Singh *et al.* (2008) concluded that the majority of SMEs have simple systems and procedures, which allow flexibility, immediate feedback, short decision-making chain, better understanding, and quicker response to customer needs when compared to larger organisations. Thus, most of them actually owned the company.

4.3.2 Number of Employees

In terms of number of employees, which covers both full-time and part-time employees, the respondents indicated having five to 10 full-time employees (61.3% or 92 respondents), followed by having more than 25 full-time employees (22.7% or 34 respondents), 11 to 15 full-time employees (13.3% or 20 respondents), and 16 to 20 full-time employees (three respondents or 2.0%). However, only one respondent (0.7%) pointed out to having 21 to 25 full-time employees.

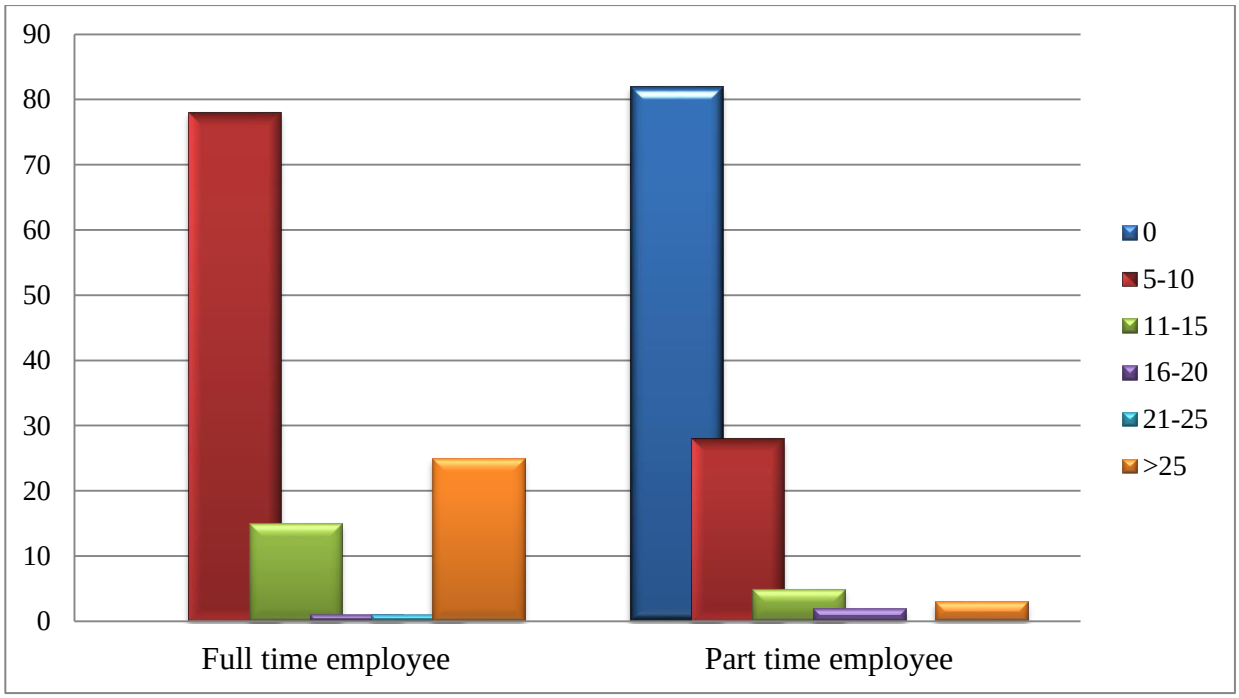

Figure 4.3

Number of Employment

In contrast, 66.7% or 100 respondents did not have any part-time employees. Meanwhile, 24.0% (36 respondents) have five to 10 part-time employees, 4.7% (seven

respondents) with 11 to 15 part-time employees, and 2.7% (four respondents) operate with more than 25 part-time employees. Meanwhile, only 2.0% or three respondents have 16 to 20 part-time workers currently employed.

This study supported the fact that was highlighted by SME Annual Report (2011), where NSDC established that total full-time workers must fall between five to 50 full-time employees in order to be classified as an SME. Thassanabanjong *et al*. (2009) established that there are a small number of total employees in SMEs because the majority of SMEs are family businesses and it would be controlled by at least one or more family members. In addition with a small portion of workers, it would be easy to handle the morale and emotion of the workers, especially emphasis on loyalty and care about the business.

4.3.3 Number of Years the Company has Operated

A total of 35.5% or 53 respondents have operated the business between one to five years. This indicates that many of the enterprises are still in their early stage of development. This is then followed by 23.3% (35 respondents) operating six to 10 years, 20.0% (30 respondents) operating 11 to 15 years, and 11.3% (17 respondents) still operating after more than 20 years of operations. Only 10% (15 respondents) have operated their business for 16 to 20 years.

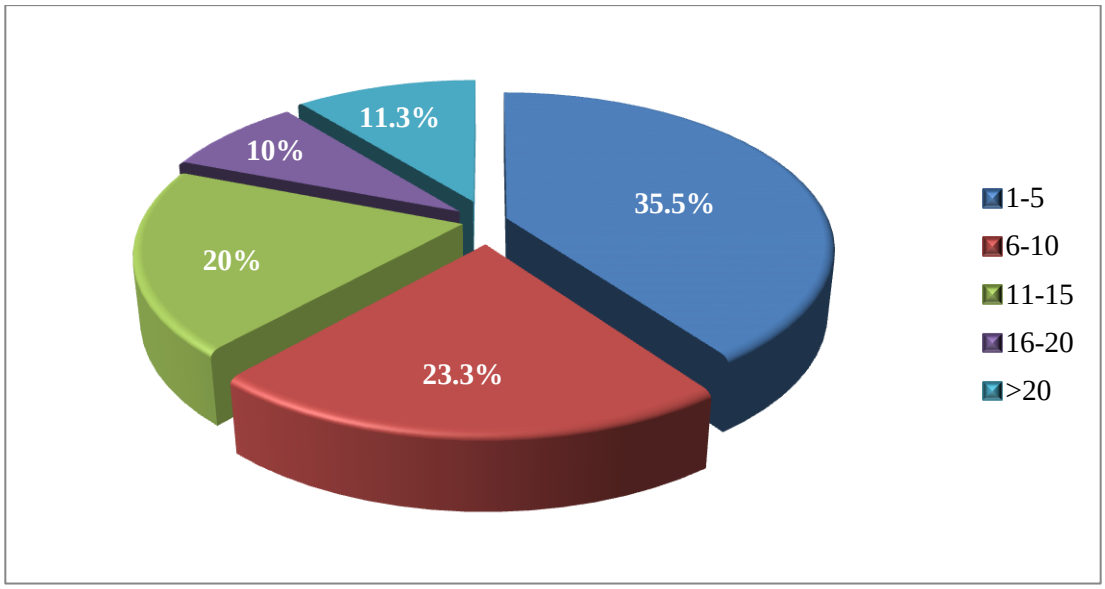

Figure 4.4

Years of Operation

This finding suggested that most SMEs are young, operating between one to 10 years. This is supported by the work done by Hashim (2005), Chittithaworn, Islam, Keawchana, and Muhd Yusuf (2011), and Senik, Isa, Scott-Ladd, and Entrekin (2010), where it was revealed that most SMEs would have less than 10 years of operation.

4.3.4 Funding to Start and Expand the Business

This study revealed that the majority of the SMEs had started their business using their own funds (94.0% or 140 respondents), whereas only 6.0% (10 respondents) did not. However, 56.0% (84 respondents) had used external funds to expand their business while the rest tend to use their own funds (44.0% or 66 respondents).

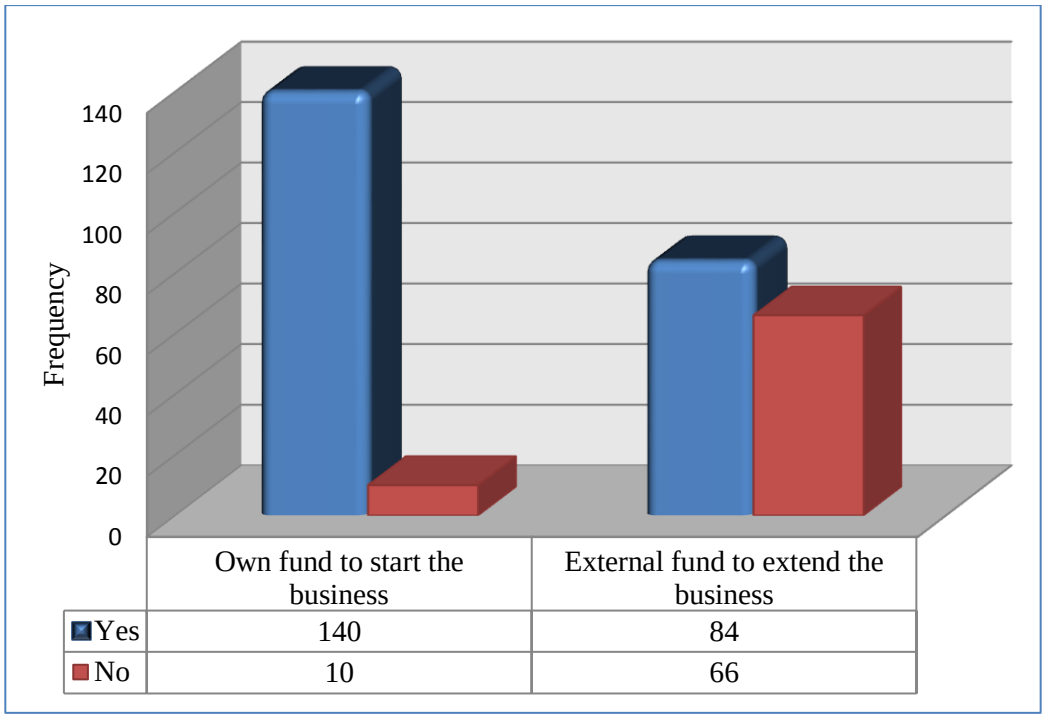

Figure 4.5

Funding for the Business

The above finding suggested that the majority of the respondents used their own financial resources during the early stages. This is consistent with Economic Census (2011) result, where the majority of SMEs also used their own internally generated funds or funds from their families and friends to finance their operations. In addition, Abdullah and Ab Manan (2011) and Mohd Shariff (2003) highlighted that to obtain funds to start-up a business is a challenge because SMEs lack an established track record and no hands-on experience in business compared with larger enterprises. They are perceived to lack credibility in the eye of the fund provider. Accordingly, at the start-up stage, SMEs tend to depend on their own savings, their family, and trade credit (Mohd Shariff *et al.*, 2006) without any institutional help (Levitsky & Prasad, 1989; Balkenhol, 1999; Economic Census, 2011; Abdullah & Ab Manan, 2011). However, there is a need

for external funding for the firm's development once the firm begins to expand (Mohd Shariff, 2003; Economic Census, 2011; Abdullah & Ab Manan, 2011).

4.3.5 Assistance Received from the Government

The role of the Malaysian Government in developing and expanding the growth of SMEs has been flourishing for many years (SME Corporation, 2011). Over the years, there is increasing number of ministries and agencies involved in providing assistance for SME programmes (Hashim, 2005). In addition, the regional development authority (such as the Penang Development Authority – PERDA and the Kedah Regional Development Authority – KEDA) and state agencies (for example the Penang Development Corporation – PDC) also initiated programmes to support the development of SMEs in Malaysia.

In this research, the majority (71.0% or 105 respondents) surveyed have received non-financial assistance from SME Corp. Malaysia. However, only 26.0% (39 respondents) received financial support. Only 3.0% (four respondents) utilised both, financial and non-financial support provided by SME Corp. Malaysia.

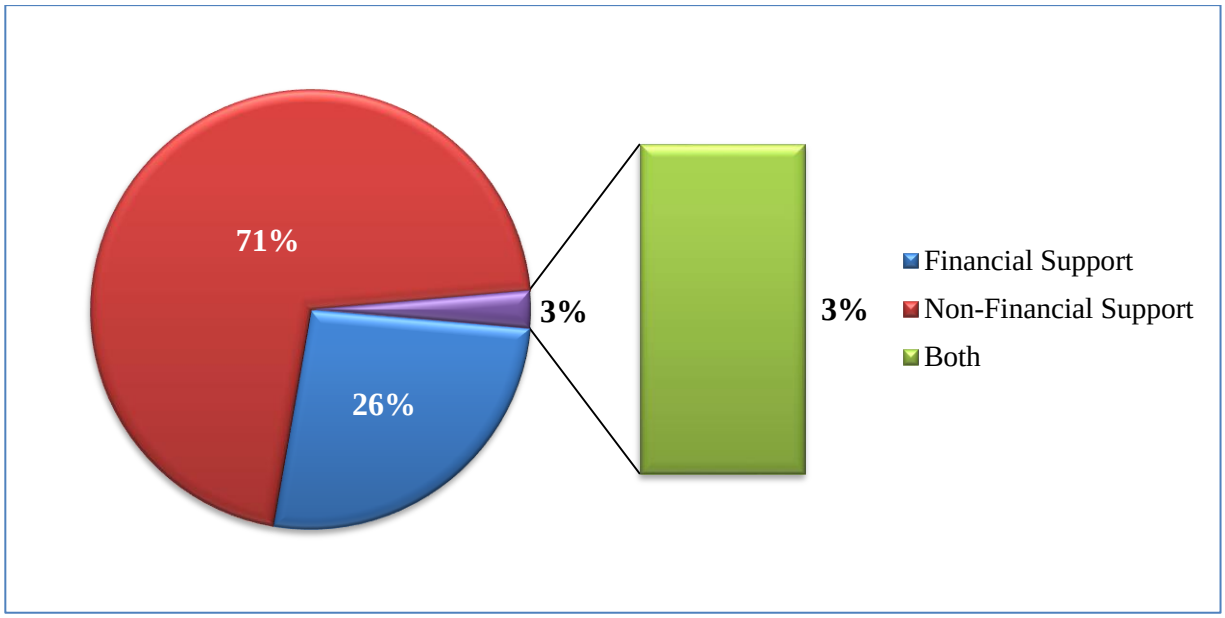

Figure 4.6

Assistance Received from the Government

This research showed that the majority of respondents were actually receiving more non-financial support compared to financial support. This research supported Mohd Shariff (2003) findings that found SMEs to have difficulties in getting access to financial support as there are so many requirements to be fulfilled by them. This research revealed that most SMEs were actually looking for something that may maximise their ability to build capability. However, Mathibe (2010) found that the combination of non-financial support with provision of finance is commonly used to enhance SME performance.

4.3.6 Programmes Affecting Business Performance

Table 4.3 shows the various programmes ranked according to percentage. From the total of 150 respondents, OM or manager perceptions still believe that financial support (53.1%) is the most important assistance that the government should provide to

strengthen their company performance. This is followed by training or mentoring programmes (33.6%), consultancy services (32.9%), and also business seminars (30.9%). They ranked the start-up programmes (28.2%) as the least important assistance for improving their business performance.

Table 4.3
Percentages of Each Rank

	PERCENTAGE (%)				
	RANK 1	**RANK 2**	**RANK 3**	**RANK 4**	**RANK 5**
Financial Support	**53.7**	8.1	4.0	9.4	24.8
Business Seminar	21.5	18.8	14.1	14.8	**30.9**
Consultancy Services	6.7	24.2	22.1	**32.9**	14.1
Training / Mentoring programme	4.7	20.8	**33.6**	26.2	14.8
Start Up Programme	13.3	**28.2**	26.2	16.8	15.4
Total	100	100	100	100	100

This research is consistent with findings by Abdullah and Ab Manan (2011), where the majority of SMEs have successfully applied for loans. Abdullah (1999) indicated that there are a high percentage of successful applications for SME financing from various funding institutions via Credit Guarantee Corporation (CGC).

4.3.7 SME Development Programme by SME Corp.

Based on the research, the majority of respondents benefited from business matching (62 respondents or 41.6%) and mentoring programmes (38 respondents or 25.5%). This research finding is consistent with the output by Mole (2002), Turok and Raco (2000), and Mathibe (2010).

Table 4.4
Profile of Respondents

Variable	Frequency	Percentage (%)
Position		
OM	88	59.1
Manager	61	40.9
Number of employment		
a) Full time employee		
5-10	92	61.3
11-15	20	13.3
16-20	3	2.0
21-25	1	0.7
>25	34	22.7
b) Part time employee		
5-10	36	24.0
11-15	7	4.7
16-20	3	2.0
>25	4	2.7
None	100	66.7
Years of operation		
1-5	53	35.3
6-10	35	23.3
11-15	30	20.0
16-20	15	10.0
>20	17	11.3
Own fund to start the business		
Yes	140	94.0
No	9	6.0
External fund to extent the business		
Yes	84	56.4
No	65	43.6
Assistance received from SME Corp.		
Financial Support	39	26.4
Non-Financial Support	105	70.9
Both	4	2.7
Assistance might affect company performance		
Rank 1 : Financial Support		
Rank 2 : Training and Mentoring Programme		
Rank 3 : Consultancy Service		
Rank 4 : Business Seminar		
Rank 5 : Start Up Grant		
N=150 (Number of respondents)		

4.4 Goodness of Measurement

Before proceeding to the further tests, it was necessary to test the validity and reliability of the constructs. Factor analysis was performed to measure the construct validity of the instrument. Since THE sample size for this paper was 150, it is appropriate for conducting factor analysis as recommended by Hair *et al.* (2006) where the minimum sample size should be 100.

4.4.1 Factor Analysis of SME Performance

A total of 10 items were used to measure SME performance. After carrying out the factor analysis, the results indicated a single factor solution with Eigen values greater than 1.0 and the total variance explained was 54.93% of the total variance. KMO measure of sampling adequacy was 0.877 indicating sufficient inter-correlations while the Bartlett's Test of Sphericity was significant (Chi Square = 839.138, $p<0.01$). The results confirmed that each construct was uni-dimensional and factorially distinct, and the items used to measure a particular construct loaded onto a single factor.

4.4.2 Factor Analysis of Absorptive Capacity

A total of seven items were used to measure organisational absorptive capacity. The results indicated a single factor solution with Eigen values greater than 1.0 and the total variance explained was 56.659% of the total variance. KMO measure of sampling adequacy was 0.864 indicating sufficient inter-correlations while the Bartlett's Test of Sphericity was significant (Chi Square = 452.183, $p<0.01$). The results confirmed that each construct was uni-dimensional and factorially distinct, and items used to measure this particular construct loaded onto a single factor.

4.4.3 Factor Analysis of GBSS (Financial Support by the Government)

Meanwhile, three items were used to measure financial support by the government. After carrying out the factor analysis, the results indicated a single factor solution with Eigen values greater than 1.0 and the total variance explained was 58.672% of the total variance. KMO measure of sampling adequacy was 0.606 indicating sufficient inter-correlations while the Bartlett's Test of Sphericity was significant (Chi Square = 65.910, $p<0.01$). The results confirmed that each construct was uni-dimensional and factorially distinct, and items used to measure this particular construct loaded onto a single factor.

4.4.4 Factor Analysis of GBSS (Non- Financial Support by the Government)

A total of four items were used to measure non-financial support by the government. The results indicated a single factor solution with Eigen values greater than 1.0 and the total variance explained was 43.961% of the total variance. KMO measure of sampling adequacy was 0.630 indicating sufficient inter-correlations while the Bartlett's Test of Sphericity was significant (Chi Square = 55.832, $p<0.01$). The results confirmed that each construct was uni-dimensional and factorially distinct, and items used to measure a particular construct loaded onto a single factor.

4.5 Descriptive Results

4.5.1 Government Business Support Service in Malaysia

Table 4.5 shows the respondents' opinion on Government Business Support Service in Malaysia. The highest mean obtained was 4.79 where the respondent believed there is communication after received assistance. The respondents also believed that there are

too many terms and conditions to be complied to before the loan could be approved (second highest mean = 4.64), and the government is doing enough to help businesses in Malaysia (mean = 4.46). Whereas the lowest mean is easy to deal with the person or officer who handled the application (mean = 4.45).

Table 4.5
Mean Score for Respondent Opinion on GBSS in Malaysia

	Mean	**Std. Deviation**
There is follow up after received any assistance	4.7933	0.40627
There are too many terms and conditions to be complied before the loan being approved	4.6400	0.60512
The government is doing enough to help entrepreneurial business in Malaysia	4.4600	0.71070
It is easy to deal with person / officer who handled the application	4.4533	0.40627

Note: All items used a 5-point Likert scale with (1=Strongly disagree and 5=Strongly agree)

Table 4.5 shows that there is communication after the assistance has been received from the government (Ismail, 2009), even though some firms have experienced too many terms and conditions to be complied with (Yusoff & Yaacob, 2010). It can be surmised that regulations may potentially contribute highly to the decision of choosing the best assistance provided by the government (Mathibe, 2010; Dana, 1998).

4.5.2 Financial Support Service by Government

Table 4.6 shows the respondents' opinion on financial support service provided by the government. Respondents believed that the company relies more on short term loans for development. This is shown by the highest mean with 4.21, together with the fact that there is high access to financing due to various guarantee schemes by the government (4.21). Meanwhile, the lowest mean belongs to the fact that the respondent believed that it is difficult to apply for a new loan (mean = 4.17).

Table 4.6
Mean Score for Respondent Opinion on Financial Support Service by Government

	Mean	**Std. Deviation**
The company rely more on short term loan for company development	4.2133	0.81584
There is high access to financing due to various guarantee schemes by government	4.2133	0.75606
It is hard for the company to apply the following new loan after getting the first loan	4.1667	0.92262

Note: All items used a 5-point Likert scale with (1=Strongly disagree and 5=Strongly agree)

Findings from Table 4.6 suggest that SMEs want to apply for long term loans. However, due to strict regulations and all assistance is actually open for all Malaysians; it is difficult for them to apply for new loans (Saleh & Nbusi, 2006; Ting, 2004; APEC, 1994). Therefore, SMEs rely more on short term loans for company development.

4.5.3 Non-Financial Support Service by Government

Table 4.7 shows the respondents' opinion on non-financial support services provided by the government. With the highest mean of 4.83, the respondents believed that sharing

knowledge can increase production within the company. Respondents also believed that the technology received mostly meet what the company needs (second highest mean = 4.65), whereas the company can learn new things effortlessly (mean = 4.63). The lowest mean is 4.627 where the quality of a mentorship programme might help to make the company sustainable.

Table 4.7
Mean Score for Respondent Opinion on Non-Financial Support Service by Government

	Mean	**Std. Deviation**
Sharing knowledge among participants in the same industry in seminar / workshop increase my company production	4.8333	0.43990
The equipment and technology been provided usually meet our company needs and requirement	4.6533	0.47750
The company could exchange new ideas, experience and knowledge if attending seminar / workshop organised by the government	4.6333	0.57249
The qualities of a mentorship programme provided are helping my company to be more sustainable	4.6267	0.61901

Note: All items used a 5-point Likert scale with (1=Strongly disagree and 5=Strongly agree)

Based on Table 4.7, it can be concluded that SMEs can maximise their assistance received by getting involved in activities through which knowledge can be exchanged among people, friends, and communities, or between organisations (Banker *et al.*, 2007). By recognising valuable intangible knowledge, it may create and sustain competitive advantage for SMEs (Tsai, 2001; Cohen & Levinthal, 1990).

4.5.4 Organisational Absorptive Capacity

Table 4.8 shows the respondents' opinion on absorptive capacity. With the highest mean of 4.70, the respondents believed that the company is capable of performing appropriate action in accordance with the needs of the company. The second highest mean with 4.68 is that respondents may enhance acquisition and assimilation capacity toward receiving new knowledge. The lowest mean was 4.47, requiring the company to enhance acquisition and assimilation capacity toward tacit knowledge.

Table 4.8
Mean Score for Respondent Opinion on Absorptive Capacity

	Mean	**Std. Deviation**
Forming appropriate action to the needs of the company	4.7000	0.52775
Enhancing acquisition and assimilation capacity towards new knowledge	4.6800	0.54735
Ability to absorb external knowledge	4.6800	0.52226
Absorbing external knowledge for increasing company capabilities	4.6733	0.54952
Enhancing knowledge and technology in the manufacturing process	4.6400	0.60512
Improvement in acquiring knowledge management	4.6267	0.56219
Enhancing acquisition and assimilation capacity towards tacit knowledge	4.4733	0.66248

Note: All items used a 5-point Likert scale with (1=Strongly disagree and 5=Strongly agree)

Based on Table 4.8, this researcher can determine that newly acquired information from outside the organisation is useful (Johnson & Loader, 2003) and by applying it within the organisation, it would be capable of producing tangible results (Wang & Han, 2011).

As iterated in human resource management, employees are a crucial source of business knowledge, skills, and experience. Therefore, absorptive capacity is useful for improving the ability and resourcefulness of the employees who use this method.

4.5.5 SME Performance

Table 4.9 shows the respondents' opinion on SME performance. The highest mean of 4.74 shows that the respondents can increase their level of customer loyalty after receiving assistance from the government. The second highest mean with 4.72 shows that the respondents also believed that assistance can increase level of customer satisfaction. Whereas, the lowest mean of 4.48 implies that receiving assistance on labour productivity will improve SME performance.

Table 4.9
Mean Score for Respondent Opinion on SME performance

	Mean	**Std. Deviation**
Level of customer loyalty	4.7400	0.52367
Level of customer satisfaction	4.7267	0.50363
Growth in Sales Revenue	4.7267	0.55438
Return on Sales	4.6933	0.53025
Profitability	4.6533	0.54325
Market Share	4.6200	0.57545
Overall financial performance	4.5933	0.59185
Growth of Machine	4.5733	0.62763
Return on Asset	4.5600	0.59618
Labour Productivity	4.4800	0.66272

Note: All items used a 5-point Likert scale with (1=Strongly disagree and 5=Strongly agree)

Based on Table 4.9, it can be surmised that any assistance received by the government (either financial or non-financial) potentially contributes toward enhancing customer loyalty, customer satisfaction, and at the same time generate growth in sales revenue (Mohd Rosli *et al*., 2012). Therefore, with well-managed programmes, SMEs may create closer interactions with their customer (i.e., towards marketing or packaging). It will encourage the customer to remain active and choose to do business with the company.

4.6 Correlation Result

Correlation analysis was conducted to explain the relationship among the variables in this study. Pearson correlation was used to examine the coefficient of all variables, to check multicollinearity, and test the linear relationship between variables. In general, bivariate correlations provide confidence that the measures have functioned properly.

Table 4.10

Correlation between SME Performance and Independent Variables

Dependent Variable		**Independent Variables**	
SME Performance		Financial Support	Non-Financial Support
	Pearson Correlation	0.169*	0.454**
	Sig.(1-tailed)	0.020	0.000

**. Correlation is significant at the 0.01 level (1-tailed)

*. Correlation is significant at the 0.05 level (1-tailed)

Due to the nature of this study, the one-tailed test can be used when hypotheses leads to some direction where, in this paper, there is a specific direction to the hypotheses (H_1 and H_2). The coefficient of the correlation ranges between -1 and +1. This shows that the strength of relationship can be categorised into high, low, and moderate strengths, depending on the value of the correlation coefficient. The level of significance can be either 0.05 or 0.10 for lower and higher coefficients, respectively.

The intercorrelation of the study variables is presented in Table 4.10, where it reveals that the correlation between dependent variable and independent variables are all positive with ($p < 0.05$). Therefore, all hypotheses were supported where the strongest correlation appears to be non-financial support ($r = 0.454$).

4.7 Standard Regression Analysis Result

In the previous test using correlation, the hypotheses posited that financial support and non-financial support by the government have significant relationships with SME performance. In order to explore the percentage of variable influence, the hypotheses were further tested using standard regression analyses. The results are presented in Table 4.11.

Table 4.11 indicates that all independent variables together explained 21% ($R^2 = 0.207$) in SME performance, which is significant as indicated by F-Value of 19.18. Financial support was a positive significant predictor of financial support ($B = 0.033$, $P > 0.5$). Non-financial support was also included in the regression equation ($p = 0.044$, $p < 0.5$) and it remained a significant predictor of non-financial support, with standard

coefficients beta increasing to 0.0444. An examination of t-value indicated that financial support (t = 5.753) contributed most to SME performance followed by financial support (t = 0.427). Hence, non-financial support is the best predictor for training effectiveness.

Table 4.11
Standard Regression Analysis Results of SME Performance Predicting Independent Variables

Model	R^2	F-Value	Standardized Coefficients Beta	T-Value	Sig.
Regression	0.207	19.183			0.000
Financial Support			0.033	0.427	0.670
Non-Financial Support			0.444	5.753	0.000

4.8 Hierarchical Regression Analysis Result

The regression analyses were performed to identify interaction between the independent variables (financial and non-financial support by the government), moderating variable (organisational absorptive capacity), and the dependent variable (SME performance). The steps in analysing the relationships of the variables were based on hierarchical regression analysis and the recommendation by Baron and Kenny (1986).

After conducting the analysis, the results are summarised in Table 4.12. Three criteria to test the moderator variable that need to be fulfilled are as follows:

1. The R^2 is increased from Step 1 to Step 3.
   (Step 1=0.223, Step 2=0.429, Step 3=0.461).
2. Adjusted R^2 also increased at Sig. F change 0.001 (must be less than 0.05).

3. Additional variance to explain the interaction also shows that R^2 change is sufficient on Sig. F change of less than 0.05.
4. The interaction terms between the independent variables (GBSS) and moderation variable (organisational absorptive capacity) were examined to test the moderation effects. The model was proven to be significant at $p<0.05$ with value of R^2being increased. Increase in R^2 signified the presence of moderator effect. The results in Table 4.12 indicates that organisational absorptive capacity moderates the relationship between GBSS and SME performance (Sig. F Change = 0.004).

Results revealed that the interaction effect between organisational absorptive capacity and GBSS was found to be significant at the 0.05 level of significance (β=-0.802, $p<0.05$). This shows that absorptive capacity moderates the relationship between GBSS and SME performance. Meanwhile, the graph illustrated in Figure 4.7 elaborates that positive relationship between GBSS and SME performance would be stronger when absorptive capacity is higher. Thus, it can be said that higher levels of organisational absorptive capacity does result in a stronger relationship between GBSS and SME performance.

This finding is interesting since previous research has focused on direct effects of financial or non-financial support provided by government in explaining SME performance, without addressing on the extent to which absorptive capacity might moderate SME performance. When moderation effect of absorptive capacity was added to the model, it was found to be positively and significantly related to SME performance.

Table 4.12
Hierarchical Regression Results using Absorptive Capacity as a Moderator in the Relationship between GBSS and SME performance

Independent Variable	Std. Beta Step 1	Std. Beta Step 2	Std. Beta Step 3
Model Variables GBSS	0.472	0.280	0.749
Moderating Variables Absorptive Capacity		0.493	0.962
Interaction Terms GBSS*AC			-0.802
R^2	0.223	0.429	0.461
Adjusted R^2	0.218	0.421	0.450
R^2 Change	0.223	0.206	0.032
Sig. F Change	0.000	0.000	0.004
Durbin Watson	1.765	1.765	1.765
*p<0.05, **p<0.01			

Accordingly, this study is able to further analyse for moderation effects based on coefficients table in Table 4.13.

To certify that there is a moderation effect, there is also a need to look at the *t*-value and *p*-value under the coefficients table of Model 3. Based on table above, *t*-value = -2.937 and *p*-value = 0.004.Since the *p*-value is less than 0.05, it can be concluded that there is a moderation effect.

Table 4.13
Coefficients Table

Model		Unstandardised Coefficients		Unstandardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.902	0.421		4.523	0.000
	GBSS	0.605	0.093	0.472	6.518	0.000
2	(Constant)	0.763	0.394		1.936	0.055
	GBSS	0.359	0.087	0.280	4.139	0.000
	AC	0.485	0.067	0.493	7.278	0.000
3	(Constant)	-1.709	0.926		-1.847	0.067
	GBSS	0.960	0.221	0.749	4.336	0.000
	AC	0.947	0.170	0.962	5.566	0.000
	GBSSxAC	-.115	0.039	-0.802	-2.937	0.004

a. Dependent Variable: P

Hence, the graphs were plotted to see these moderating effects. The standard value was used to re-categorise into levels based on two levels (1 = Lowest, 2 = Highest) and using median of the variables (GBSS = 4.5455, AC = 4.7143).

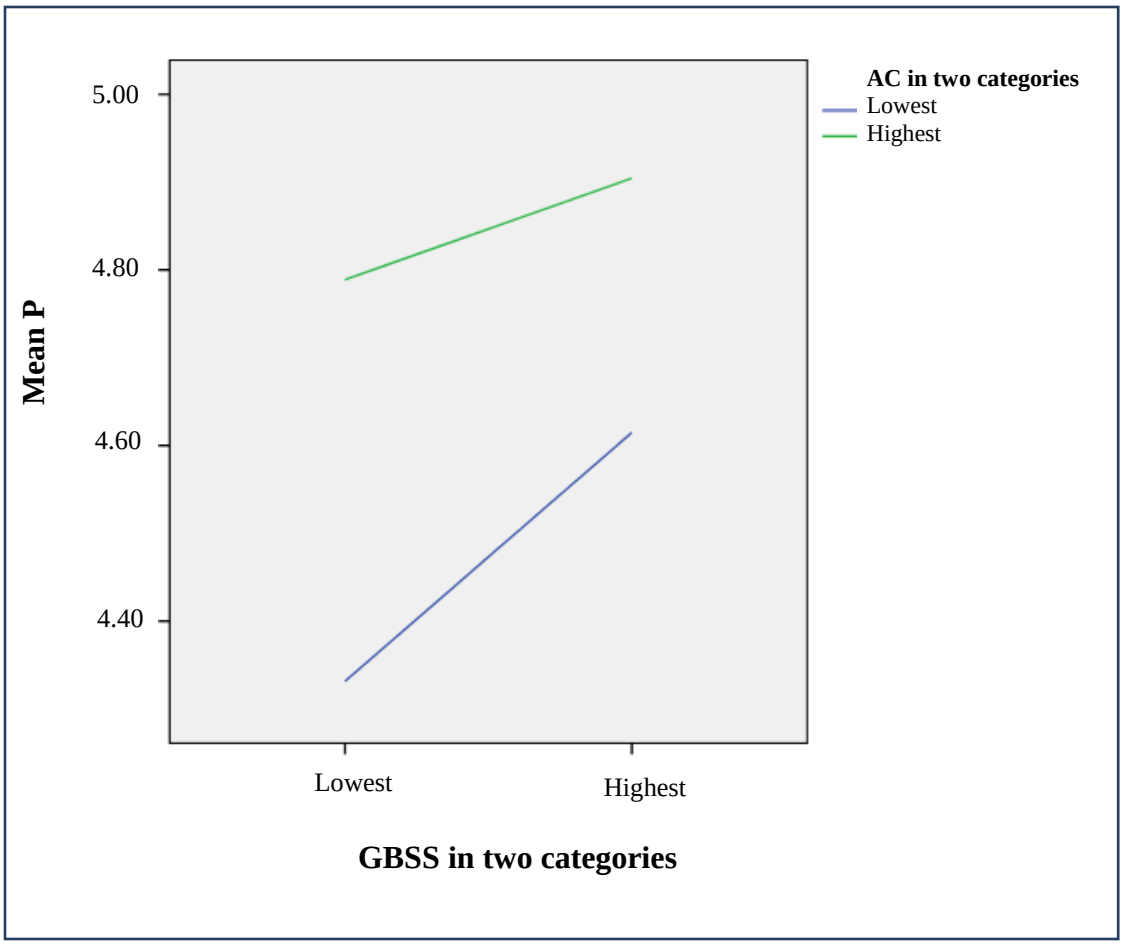

Figure 4.7
The Moderating Effect of Absorptive Capacity on the Relationship between GBSS and SME Performance

Figure 4.7 shows that the rate of change is greater for the lowest group compared to the highest group. In conclusion, absorptive capacity changes the relationship between GBSS and SME performance. The interaction does specify the appropriate conditions for its operation and there is an impact on the level of SME performance.

4.9 Relationship between Variables

4.9.1 Relationship between Financial Support and SME performance

The stated hypothesis was (H_1): There is a positive relationship between financial support provided by GBSS and SME performance.

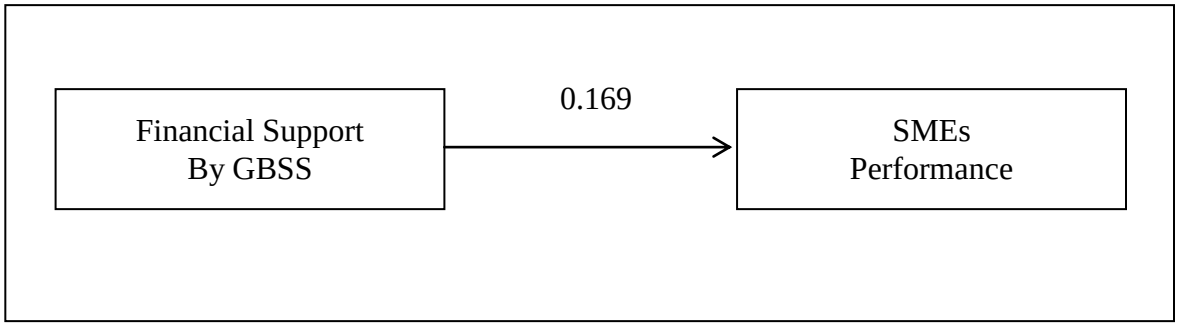

Figure 4.8
Relationship of Tested Variables (Financial Support by GBSS and SME Performance)

Based on Table 4.10, although the Pearson correlation value of r = 0.169 indicated a weak level of strength of association, yet the relationship is significant at 0.020 and is an indicator of a positive relationship between financial support provided by the government and SME performance, either in the correlation analysis or standard regression analysis. This finding is in-line with the findings of many past studies by Yusoff and Yaacob (2010), Denan (2008), and Wren and Storey (2002). However, the results contradict with the findings of some previous research by Harper (2005) and Hudson *et al*. (2001), which did not find any significant relationship between financial support provided by the government and SME performance.

Figure 4.8 shows that financial support can affect SME performance. To make a choice of which action to take within the company, there is a need for some consideration that

financial assistance may certainly deliver the predicted benefit. Financial assistance should be maximised accordingly with usage of the money for certain critical matters (Mohd Shariff *et al.*, 2006), otherwise the company will remain at the same point, before and after receiving the financial assistance. Therefore, it is possible to argue that financial support provided by the government also has an influence on SME performance (Abdullah & Ab Manan, 2011; Abdullah, 1999).

As a result, there is a statistically significant correlation between financial support provided by the government and SME performance. This means that increases in financial support from the government would significantly relate to increases in SME performance. Therefore, there is a positive relationship between financial support provided by GBSS and SME performance, thus hypothesis (H_1) was supported.

4.9.2 Relationship between Non-Financial Support and SME performance

The stated hypothesis was (H_2): There is a positive relationship between non-financial support provided by GBSS and SME performance.

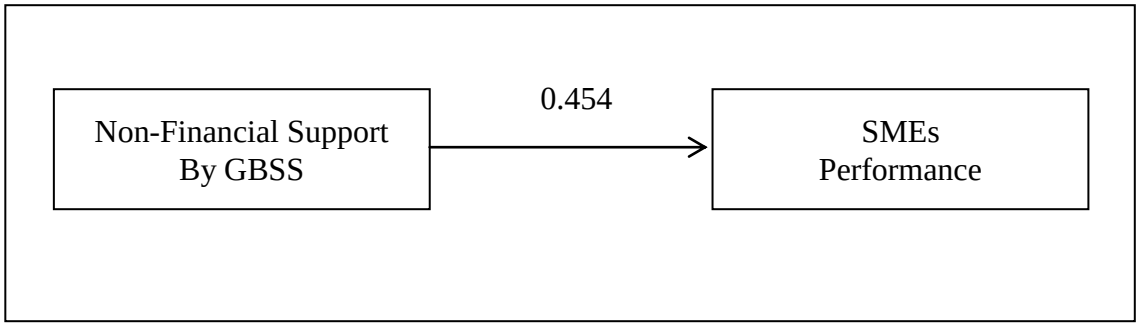

Figure 4.9
Relationship of Tested Variables (Non-Financial Support by GBSS and SMEs Performance)

As reported in Table 4.10 and Figure 4.9, a moderately strong and positive significant relationship was discovered between non-financial support provided by the government and SME performance, since r = 0.454 at p<0.01 in correlation analysis, as well as, standard regression analysis. This finding is in line with the results of previous studies by Park and Kim (2010), Lichtenthaler and Ernst (2009), and Lichtenthaler (2008).

In general, there is some kind of link between non-financial support by the government and SME performance, as raised by Zahra and George (2002b) and Tsai (2001). Among those who have received non-financial assistance, the results showed that respondents benefited from non-financial assistance. It helps SMEs to go further, perform better with predicted benefits and different approaches.

Therefore, it can be concluded that there is a statistically positive significant correlation between non-financial support provided by the government and SME performance. This means that increases in non-financial support by the government would significantly relate to increases in SME performance, thus hypothesis (H_2) was supported.

4.9.3 Moderating Effects of Absorptive Capacity on Financial Support and Non-Financial Support Provided by GBSS and SME performance

The stated hypothesis was (H_3): There is a moderating of organisational absorptive capacity on the relationship between financial and non-financial support provided by GBSS and SME performance.

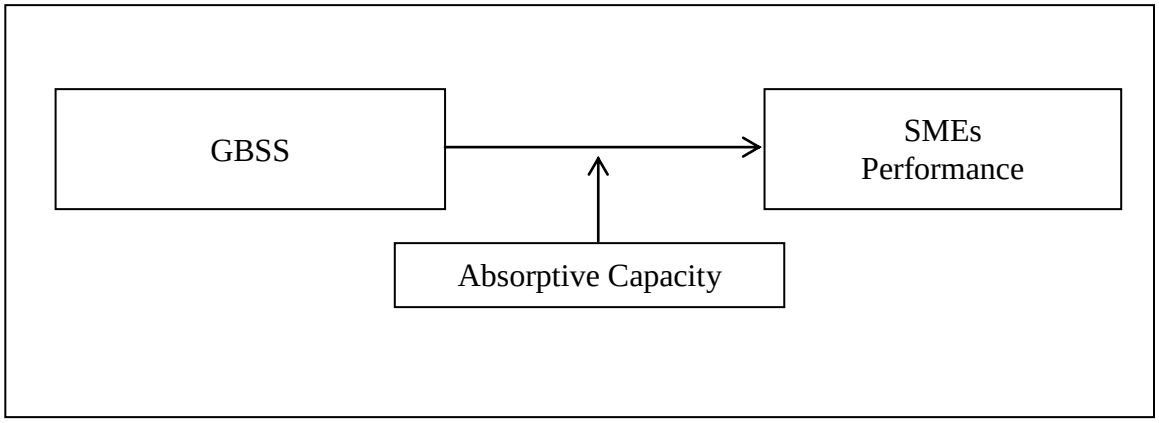

Figure 4.10
Relationship of Tested Variables (GBSS, SMEs Performance, and Partially with Absorptive Capacity)

The hypothesis stated that there is a moderating effect of organisational absorptive capacity on the relationship between financial and non-financial support, provided by GBSS, and SME performance, as illustrated in Figure 4.10. As reported in Section 4.8, there is an impact on the level of SME performance where absorptive capacity changes the relationship between GBSS and SME performance. Thus, the hypothesis (H_3) was supported.

4.10 Hypotheses Result

The results of hypothesis testing are summarised in Table 4.14.

Table 4.14
Summary of Hypotheses Result

	Hypotheses	Result
H_1	There is a positive relationship between financial support provided by GBSS and SME performance.	Accepted
H_2	There is a positive relationship between non-financial support provided by GBSS and SME performance.	Accepted
H_3	There is a moderating effect of organisational absorptive capacity on the relationship between financial and non-financial support provided by GBSS and SME performance.	Accepted

4.11 Summary

Based on the correlation and standard regression analyses, the independent variables were found to be significant and positively correlated to SME performance. The result also showed that there is a moderating effect between financial support, non-financial support, absorptive capacity, and SME performance.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.1 Introduction

The main purpose of this study was to examine the relationship between GBSS and SME performance, as well as the moderation effects of absorptive capacity on whether it has any direct or indirect influence. The framework explored each of the dimensions and constructed the effect on SME performance. The proposed constructs were guided by the following discussion questions:

a) Is there a positive relationship between financial support provided by GBSS and SME performance?
b) Is there a positive relationship between non-financial support provided by GBSS and SME performance?
c) Is there any moderation effect of organisational absorptive capacity on the relationship between financial and non-financial support provided by GBSS and SME performance?

The hypotheses were established and tested using various statistical tools that have been discussed intensively in the Chapter 4 findings. The study was conducted with the cooperation of OMs or managers in the manufacturing and service sectors in the Northern States of West Peninsular Malaysia. A total of 330 sets of questionnaires were distributed to the potential respondents and 150 usable questionnaires were returned and used for further analysis.

5.2 Discussions

This study sought to contribute toward the growing body of research that have been discussed extensively in Section 3.1 on the role of GBSS and absorptive capacity in impacting SME performance with three main objectives. The findings highlighted on the correlation between observed value of outcome and value predicted (*r*), as well as the proportion of variance (R^2). The following sub-sections will discuss the findings of the study in the same order as the objectives of the study.

5.2.1 Financial Support and SME performance

The result of correlations between financial support provided by GBSS and SME performance showed a significant positive relationship. Therefore, financial support provided by the government has an influence on SME performance.

This means that the increase in financial support from the government, will significantly relate to an increase in SMEs performance. Even though the statistical correlation is low at 0.169, it is still a positive significance. This weak relationship maybe derived from the small number of SMEs that received the financial support from the GBSS. Base on this research, only 26% of the respondents received financial support from GBSS. However, due to this positive result, it is hoped that the government would continue to increase their financial assistance to SMEs.

5.2.2 Non-Financial Support and SME performance

The result of the correlations between non-financial support provided by GBSS and SME performance showed a moderate and significant positive relationship. Therefore,

non-financial support provided by the government also has an influence on SME performance.

This would mean that an increase in non-financial support from the government, will significantly relate to an increases in SMEs performance. This finding is very interesting because the statistical correlation was at 0.454, which is moderately strong. This positive relationship is larger than compared to financial support. The contribution of non-financial assistance by the government is bigger in influence when increasing the performance of SMEs.

This could have most probably happened because of the majority of SMEs received more non-financial assistance as compared to financial assistance, as provided by the government.

5.2.3 Organisational Absorptive Capacity on SME Performance

The results showed the moderation effects of organisational absorptive capacity on the relationships between financial and non-financial support provided by GBSS, and SME performance. The results showed that when the moderation effect of absorptive capacity was added to the model, it was found to be positively and significantly related to SME performance.

This is the most interesting result found in this study, where it could be concluded that the majority of SMEs are not only capable of acquisitioning and assimilating information and assistance given through GBSS, but they are also able to exploit them to

increase their own company performance. Thus, as a result of this study, it was shown that the moderating effect by firm's absorptive capacity does strengthen the relationship between GBSS and SMEs performance.

5.3 Implications

This research adds to the existing knowledge by providing empirical evidence of the contribution. By relating the findings to prior research, there are several implications that can be drawn from the results of this present study. Beyond theoretical and empirical contribution, this study has practical importance for managers.

5.3.1 Theoretical Perspectives

The RBV provides a good framework to explain firm performance, where from the RBV perspective, internal resources and capabilities are the sources of firm performance. Thus the SMEs should be using their internal resources and capabilities, through the assistance received by the government, in improving their company performance. This is proven by the positive result on the relationship between GBSS to the performance of SMEs in this study. However the relationship between GBSS and SME performance is considered weak. According to Baron and Kenny (1986), moderator variables are typically introduced when there is an unexpectedly weak or inconsistent relation between a predictor and criterion variable.

The evidence in this dissertation showed that the positive relationship between GBSS and SME performance would be stronger when absorptive capacity is involved as a moderator. This is based on absorptive capacity theory founder by Cohen and Levinthal

(1989). Cohen and Levinthal (1989) opened up a research agenda by defining the concept of absorptive capacity and emphasising its influence on firm ability to innovate, where the implications show that companies not only rely on external knowledge, but also develop capabilities to actively absorb relevant knowledge.

This study looked at the moderate role played by absorptive capacity, as an avenue to measure its impact on SME performance thorough GBSS. The empirical results showed that firms endowed with more acquisition and assimilation capacity are better equipped to identify the presence of external knowledge. This result also showed that firms having more assimilation capacity are better equipped to absorb external knowledge.

5.3.2 Managerial Perspectives

In Chapter 4, item number 4.2.4 regarding funding to start and expand the business, this study revealed that the majority of SMEs started their business using their own funds. This is supported by other previous studies which in their respective findings basically found that financial assistance is not critical during the early stage of manufacturing SMEs (Yusof & Yaacob, 2010; Mohd Shariff, 2003). Businesses in this stage have begun to develop their operations using their own funds and resources. SMEs may have some customers, but still have yet to widely sell their products in the mainstream marketplace. After surviving for at least five years, this would be the most suitable time for additional capital and non-financial assistance to be provided simultaneously. Since customer and sales are increasing and revenues are strong, assistance by the government is needed to finance continued research and development (R&D), purchase or lease machinery and equipment, or even fund for working capital. Therefore, assistance

provided by the government should take place based on the age of the company rather than the blanket approach to provide assistance for all SMEs, regardless of what stage they are at.

From the descriptive results in Chapter 4 relating to item section 4.3.1, regarding the opinions of SMEs on GBSS provided by the Malaysian government, most of the respondents believed there is communication after they received the assistance. This would be considered as a good service provided by the government, because it would be a waste when implementing a good programme but there is no follow-up (Saud, 2005). Practically, follow-ups will allow the government to better predict the assistance-flow and provide feedback for achieving long-term goals in the future. The government needs to know if SMEs are doing what they are supposed to be doing. If they are not, the government has to do something to rectify or ease the situation. Follow-up is important to improve SME performance, where it helps to remove obstacles, authorise the priorities, and provide assistance in working around personal problems. Therefore, this would assist in maximising the distribution of funds, based on the most benefited from theses assistances.

The descriptive result on the opinion of SMEs regarding the non-financial support received from the government in item 4.3.3 in Chapter 4 found that most SMEs believed that sharing knowledge can increase production within the company. In relation to starting up the business, funding alone without additional knowledge to manage the funding is not an effective way to enhance commitment and performance of manufacturing SMEs.

Financial assistance programmes have to be provided together with relevant short and medium-term training programmes (Dana, 1998). Regarding financial support, Datar, Epstein, and Yuthas (2009), Mohd Shariff (2003), and Mohd Shariff *et al.* (2006), argued that SMEs OMs have minimal education and are basically illiterate in relation to arithmetic skills and financial knowledge, but business risks can happen to anyone and at any time. Therefore it is paramount for SMEs to receive this kind of assistance in order to aid them to deal with frustration, receive constructive criticism, or become better equipped with actions that suit the current trend. SME OMs have to increase their potential and competencies by improving the quality of leadership, decision making, and planning (Johnson & Loader, 2003), by attending both formal and informal entrepreneurial training programmes. This is clearly evident through the support provided by this study which revealed that there is a positive and significant relationship between NFS and SME performance.

Furthermore, the research also found that any assistance received by the government (either financial or non-financial) potentially contributes toward enhancing customer loyalty, customer satisfaction, and at the same time generate growth in sales revenue. This is similar with the research finding by Mohd Rosli *et al*. (2012). Therefore the government should also help OMs, especially on new marketing concepts, such as market analysis, market segmentation, as well as understanding consumer buying behaviour for providing superior customer value. The company may already have established their own product and are maintaining a healthy number of customers. Therefore, improved marketing would help SMEs to aggressively choose the best target markets through market analysis, market segmentation, as well as have a deeper

understanding on consumer buying behaviour in order to provide superior customer value.

This research has an important practical implication for the Malaysian government and policy maker. The result of the study showed that when the moderation effect of absorptive capacity was added to the model, it was found to be positively and significantly related to SME performance. Therefore the government should groom SMEs that are passionate and have a great potential in expanding their businesses, rather than just training newcomers. Basically, grooming here means provide intensive training or additional programmes that innovates potential companies from a local small scale business (like the SMEs), to a mainstay player in the international market (like the MNCs). For example, SMEs may undergo an attachment programme in MNCs for at least five months in order to gain experience on how the MNC operates and thus share the same nature of business. If the government can implement it among the Government Link Companies (GLCs), then why does the government not invest in a similar fashion in the highly potential SMEs?

Most successful entrepreneurs share a unique combination of traits. They are optimists in what they are focusing upon and believe that opportunities always lead to success, even though others are telling them otherwise. For example, the majority of university students who have graduated may have potentially interesting ideas and entrepreneurial talent, but nearly of all of them will fail without proper training and support. Entrepreneurs are made, not born (Shane, 2010). Entrepreneurs do not necessarily require complete sets of skills because they can learn through training and experience

(Lazear, 2004). Therefore, the government has to produce programmes related to entrepreneurship skills starting from the beginning of study at the undergraduate level until their graduation. Training programmes should help to improved entrepreneurial skills for achieving their objectives.

The government has to provide tools, especially hands-on programmes, which SMEs need to have a better chance at success. This is where absorptive capacity plays an important role in equipping entrepreneurs with knowledge on better handling the business. Moreover, it is better to provide a special training school for teaching entrepreneurship for anyone without bias on age or educational background. However, the combination of hands-on activities, absorbing knowledge, and implementation does not deliver the best results and seems to fail if the government still does not make any follow-up after giving assistance.

5.4 Limitations

Although this study makes several contributions by providing understanding in GBSS, SME performance, and organisational absorptive capacity, there are a few limitations that had emerged from this study which need to be mentioned. Firstly, despite the fact that this study was conducted in the manufacturing sector, extending similar studies to other sectors in Malaysia would also provide new insights. Secondly, although the model was carefully designed, it did not examine other potential dimensions within the relationship scope between GBSS and SME performance, aside from financial or non-financial aid. Thirdly, the cross-sectional research design used can only provide a snapshot of one point in time. It does not allow the determination of cause and effect or

the impact changes over time. Fourthly, SME performance was measured by the subjective perceptions of respondents which may not always be completely truthful. Furthermore, this study did not carry out interviews with the respondent. The viewpoints of owners or managers would provide further information to compliment the quantitative method of data gathering in order to have a deeper understanding of the topic discussed in this thesis. Finally, this research sample consists of SMEs based in Penang, Perlis, Kedah, and Perak, all of which are in the west coast of Peninsular Malaysia. The states from which the sample was drawn are dominated by certain type of sectors (manufacturing, agriculture, and general business), which may not necessarily be representative of the population. Barkham, Gudgin, Hart, and Hanvey (1996) found that regional studies may suffer from bias, if differences in the characteristics of firms and owner-managers exist between regions. However, evidence from previous studies has refuted regional and locational factors as being important in the study of SMEs (Storey, Watson, & Wynarczyk, 1989; Keasey & Watson, 1994). Furthermore, the focus on certain states, as opposed to a national sample for Malaysia, is justified on the basis of convenience (proximity to the researcher), time, and cost constraints.

5.5 Recommendations for Future Research

Despite the fact that this study was conducted in the northern region of West Peninsular Malaysia, extending the study to other regions in Malaysia would also provide new insights into SMEs all over Malaysia. It is also recommended that future studies need to be conducted based on a selected industry group (for example, food and beverage industry). This research would provide new in-depth information about the manufacturing sectors and SME performance. The study also suggested that a

combination of quantitative and qualitative approaches should be conducted to get better and fairer results on the understanding of the research issues. In addition, future research should focus on companies that have been established for more than five years, due to the fact that company age is one of the important determinants in influencing how firms behave and grow. Essentially, in order to evaluate SME performance, it is more relevant to explore the types of assistance by the government. Further research can provide more explanations by considering either financial or non-financial only as variables that determine SME performance. It is recommended studies to be conducted on the effectiveness of financial support on SME performance or explore details on non-financial assistance toward SME performance. Finally, it is recommended for the use of a new SME definition in Malaysia that would come into effect as of 1 January 2014, as issued by SME Corp. Malaysia.

5.6 Recommendations for Government and SMEs

Government assistance should be delivered through an establishment that really cares for the success and sustainability of SMEs in the country. The government has to avoid delivering incentives or assistance through too many agencies. Even though there are so many ministries and agencies that are involved with SMEs development, they are still basically sharing the same database. This leads to assistance being given to the same person/company that actively participates in attending programmes for SMEs. This is a good start if the government reactivated the Ministry of Entrepreneur and Cooperative Development (MECD) that puts all related agencies under one roof. Therefore, assistance can be efficiently provided on a more equal organised basis.

The government has to increase the number of centres that offer consultancy and advisory services to SMEs. Those who are involved with formulating or restructuring programmes have to consist of people who are currently facing the real situation and are uniquely specialised, either from the theoretical or practical aspects. Also, the government needs to conduct regular research or surveys to understand the problems faced by SMEs, which may change from time to time in the highly turbulent and competitive environment.

In contrast, SMEs themselves have to wisely accept any chance and assistance provided by the government. They need to maximise the assistance provided to the extent that guarantees a success for the long term. Successful entrepreneurs have to have an attitude to seriously put entrepreneurship as a career. Lastly, in the context of the information technological age and emergence of a knowledge-based economy, the role of the SME must also be enhanced through their participation in *e*-commerce and related mechanisms.

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