THE RELATIONSHIP BETWEEN STRATEGIC ENTREPRENEURSHIP AND PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN MALAYSIA

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DOCTOR OF BUSINESS ADMINISTRATION

UNIVERSITI UTARA MALAYSIA

August 2014

THE RELATIONSHIP BETWEEN STRATEGIC ENTREPRENEURSHIP AND PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN MALAYSIA

By

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Thesis Submitted to

Othman Yeop Abdullah Graduate School of Business,

Universiti Utara Malaysia,

in Fulfillment of the Requirement for the Doctor of Business Administration

Kolej Perniagaan
(College of Business)
Universiti Utara Malaysia

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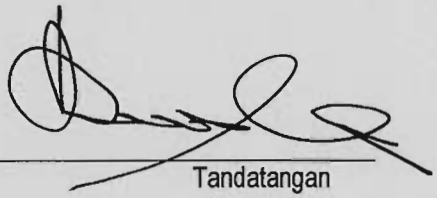
Tajuk Tesis / Disertasi
(Title of the Thesis / Dissertation) : **The Relationship Between Strategic Entrepreneurship and Performance of Small and Medium Enterprises in Malaysia**

Program Pengajian
(Programme of Study) : **Doctor of Business Administration**

Nama Penyelia/Penyelia-penyelia
(Name of Supervisor/Supervisors) : **Prof. Dr. Rosli bin Mahmood**



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ABSTRACT

The objective of this research is to determine the relationship between entrepreneurial orientation (EO), entrepreneurial values (EV), knowledge creation process (KCP), and the performance of Small and Medium Enterprises (SMEs) in Malaysia.This research analyzes these contributing variables to strategic entrepreneurship and their relationships with the performance of SMEs. There are a number of views on strategic entrepreneurship, which most have propensity for opportunity-seeking and advantage seeking behavior that require combined theories in entrepreneurship and strategic management. However, a few scholars argue that it is actually a balance of exploration and exploitation activities which correspond to the firm's capability to explore opportunities internally plus externally, and allow the sustaining of wealth creation. The research employs a quantitative and survey method, and data were collected from owner/managers of SMEs throughout peninsular Malaysia. Out of the 370 responses collected, only 335 were usable in this research. The data were analysed using multiple regressions. The findings reveal that exploration and exploitation depicted in entrepreneurial orientation, entrepreneurial values and knowledge creation process respectively were significant predictors in strategic entrepreneurship and exhibited positive influence to the performance of SMEs in Malaysia. This research contributes theoretically to the enhancement of the understanding as well as the analysis of the strategic entrepreneurship model in SMEs. It provides another empirical supports to the three variables of EO, EV and KCP where EO having the biggest strength and contribution to the firm performance. In managerial contribution aspect, the findings provide opportunities for the SMEs to engage strategic entrepreneurship activities and develop sustaining competitive advantages thereby shoring up their performance.

Keywords: entrepreneurial orientation, entrepreneurial values, knowledge creation process, performance, small and medium enterprises.

ABSTRAK

Kajian ini bertujuan menentukan hubungan di antara orientasi keusahawanan (EO), nilai-nilai keusahawanan (EV), proses penciptaan pengetahuan (KCP) dan prestasi Perusahaan Kecil dan Sederhana (PKS) di Malaysia. Kajian ini menganalisis pembolehubah yang menyumbang kepada keusahawanan strategik dan hubungan mereka dengan prestasi PKS. Terdapat beberapa pendapat mengenai keusahawanan strategik, kebanyakannya mempunyai kecenderungan untuk mencari peluang dan tingkah-laku mencari kelebihan yang memerlukan gabungan teori-teori keusahawanan dan pengurusan strategik. Walau bagaimanapun, beberapa penyelidik berpendapat bahawa ia adalah sebenarnya mengira aktiviti-aktiviti penerokaan dan eksploitasi yang sepadan dengan keupayaan syarikat untuk meneroka peluang-peluang secara dalaman dan luaran, dan membenarkan pengekalan kekayaan. Kajian ini menggunakan kaedah kuantitatif dan kaji selidik, dan data telah dikumpul daripada pemilik/pengurus PKS di seluruh semenanjung Malaysia. Daripada 370 respons yang dikumpulkan, hanya 335 boleh digunakan dalam kajian ini. Data dianalisis menggunakan regresi berganda. Dapatan kajian menunjukkan bahawa penerokaan dan eksploitasi yang digambarkan dalam orientasi keusahawanan, nilai-nilai keusahawanan dan proses penciptaan pengetahuan masing-masing merupakan peramal yang signifikan ke atas keusahawanan strategik dan mempamerkan pengaruh positif kepada prestasi PKS di Malaysia. Kajian ini menyumbang secara teori untuk meningkatkan pemahaman serta analisis model keusahawanan strategik dalam PKS. Ia menyediakan satu lagi sokongan empirikal kepada tiga pembolehubah EO, EV dan KCP di mana EO mempunyai kekuatan dan sumbangan yang terbesar kepada prestasi firma. Dalam aspek sumbangan kepada pengurusan, penemuan-penemuan ini memberi peluang bagi PKS untuk terlibat dalam aktiviti-aktiviti keusahawanan strategik dan membangunkan daya kelebihan saing yang seterusnya meningkatkan prestasi mereka.

Kata Kunci: orientasi keusahawanan, nilai-nilai keusahawanan, proses penciptaan pengetahuan, prestasi, perusahaan kecil dan sederhana.

ACKNOWLEDGEMENT

I would like to express my greatest appreciation to Professor Dr. Rosli Mahmood for his expert advice and constructive suggestions during the planning and development of this research work. His willingness to give his time so generously has been very much appreciated. Without his pragmatic guidance, I would not accomplish the delivery of dissertation on time.

Words cannot express how grateful I am to my beloved wife Melissa Liow Li Sa for all of the supports and sacrifices that she has made on my behalf, throughout the years of my study. I would also like to extend my appreciation to all the DBA lecturers for their valuable lessons and guidance. Last but not least, I would like to thank some of my DBA classmates, especially Mr. Shathees Baskaran, for spending time discussing on dissertation writing and compilation.

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CHAPTER ONE : INTRODUCTION

1.1 Background of study

The significant role of Small and Medium Enterprises (SMEs) in economic development amongst the key world economies has been known for very long time. SMEs are the accelerators and have great impact to growth performance of a country economic, particularly in such a dynamic surge in market competition internationally and variation in happening (Normah, 2007; Ladzani & Vuuren Van, 2002). The establishment of social stability and economic welfare of a nation together with the creation of many job opportunities are some of the SMEs' contributions (Ladzani & Vuuren Van, 2002; Steiner & Solem, 1988). As such, SMEs have turned out to be the central consideration of government particularly in the annual budget announcement or during planning of the short-term or long-term economy policy (Bernama, October 08, 2011).

The strategic significance of SMEs has been recognized (Underwood, 2003) as followed. Firstly they are accountable for creating job opportunities at a quicker pace than larger organization. Secondly they enlarge the competitive forces of the market and hence decrease the monopoly advantage of large organizations. Finally they promote the progress in entrepreneurial skills and innovation.

Many studies have revealed that SMEs are important in nurturing economic growth; create employment prospect and decreasing poverty (Singh & Mahmood, 2014; Sumaiyah & Mahmood, 2011; Arinaitwe, 2006, Ayyagari, Beck & Demirguc-Kunt, 2005; Karides, 2005; O'Regan & Ghobadian, 2004; Audretsch, 2002). There is abundance of reports in

Malaysia that show the position those SMEs taken in the bigger economy. SMEs contribute 3,669,259 employments and 19 percent of the country's exports in total. The SMEs also constitutes 97.3 percent of the total business establishments and is an important contributor to the nation's gross domestic product at 32.5 percent in 2010 (Economic Census, 2011). Below Table 1.1 is the number and percentage of SME establishment by sector in Malaysia:

Table 1.1
Number and Percentage of Establishment by Sector in Malaysia

Sector	Micro	Small	Medium	Total SMEs	Total SMEs	Large Firms	Total Establishment
	Number of Establishments				% share	Number	Number
Manufacturing	21,619	13,934	2,308	**37,861**	**5.9**	1,808	39,669
Services	462,420	106,061	12,504	**580,985**	**90.1**	10,898	591,883
Agriculture	3,775	1,941	992	**6,708**	**1.0**	2,121	8,829
Construction	8,587	6,725	3,971	**19,283**	**3.0**	2,857	22,140
Mining & Quarrying	57	126	116	**299**	**0.05**	119	418
Total SMEs	**496,458**	**128,787**	**19,891**	**645,136**	**100.0**	**17,803**	**662,939**

Source: Economics/SMEs Census 2011 by Department of Statistics, Malaysia.

The contribution of SMEs to GDP grew by 2.2 percent from 29 percent in 2005 to 31.2 percent in 2009; 32.5 percent in 2010 (Economic Census, 2011); 32.7 percent in 2012 (SME Annual Report 2012/13); 33 percent in 2013 (theStarOnline, April 26, 2013) and on track to 41 percent by 2020 (the StarOnline, February 18, 2014). Following **Error! Reference source not found.** shows the SMEs contribution to GDP in selected countries.

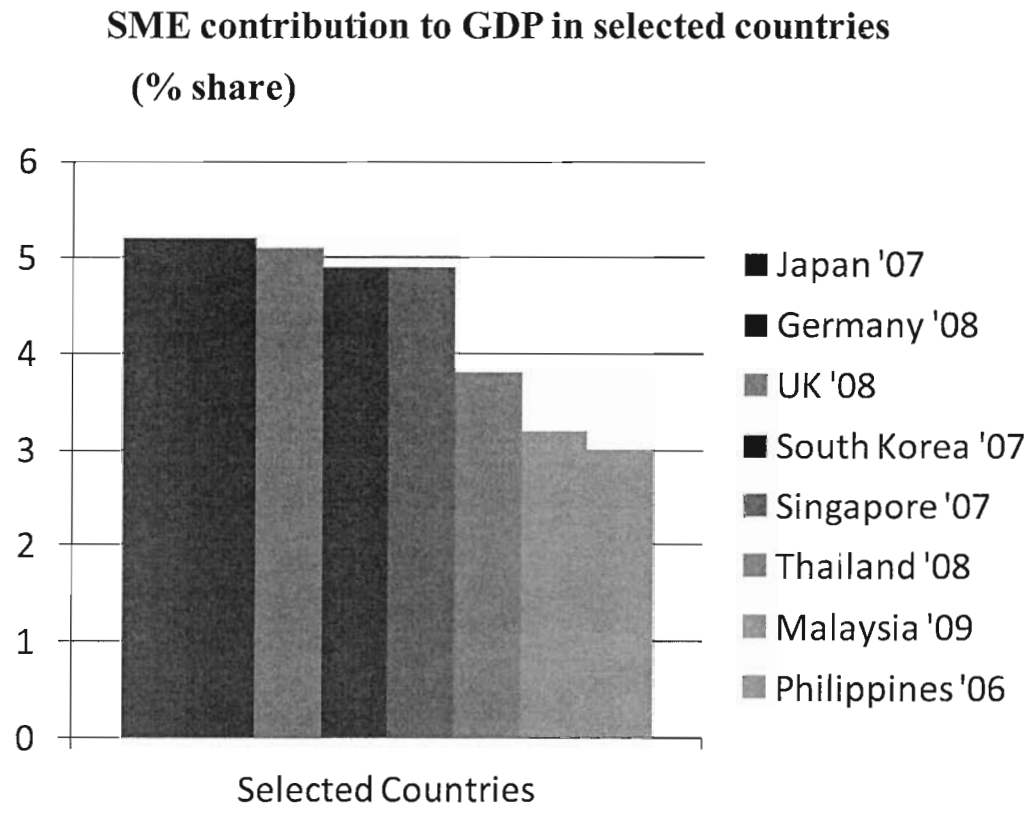

Figure 1.1
SME contributions to GDP in selected countries

Source: SME agencies from various countries, SME Annual Report 2009/10

In spite of the unpredictability of the external environment, the Malaysian government has carried out numerous initiatives under the 10th Malaysia Plan and the Economic Transformation Programme (ETP) such as the My Rapid Transit (MRT) project, which are supposed to enhance SME growth. Once the construction packages of MRT begin to unfold, it will generate a multiplying and domino impact and a spillover of economic benefits and this will do goods to the SMEs. At the same time, the SMI Association is aggressively in assisting local SMEs to get funding for their business. During the 2012

budget, the government declared a syariah-compliant SMEs financing fund totalling RM2 billion that was launched in 2012 (theSundaily, February 07, 2012).

To take the product or research concept to market is an important reason in encouraging innovation and the government has appropriately addressed via the Commercialization Innovation Fund, totalling RM500 million (US$158 million), which enables SMEs to commercialize research products. Effective 2012, this fund is accessible at certain Islamic banks with the government financing two per cent of the profit rate. Bank Simpanan Nasional (BSN) is offering RM100 million (US$31.69 million) for soft loans with four percent interest plus stamp duty exemption to promote professionals like lawyers, doctors and accountants to start up firms in small towns as part of the government's Rural Transformation Programme (theSundaily, February 07, 2012). The teamwork between the public-private sectors will be significant in helping local research and innovation in entering into market. The government would leverage the huge strength of private sector experiences and most excellent practices in product commercialization.

The government has highlighted six big influence programmes like the introduction of an integrated registration and licensing of businesses to generate a one-stop registration centre through the MyCOID business registration system and the Business Licensing Electronic Support System (BLESS) to enhance the SMEs' growth to 8.7 percent by 2020 (theSundaily, February 07, 2012).

The business atmosphere in this twenty-first century can be considered as a new competitive backdrop that covers innovative managerial attitude, rising risk, diminishing

predictability, new structural appearances, volatile company and industry borders. This new setting can be depicted as four influential forces namely change, complexity, chaos, and contradiction (Bettis & Hitt, 1995; Hitt & Reed, 2000). No organization is unaffected to the huge influences of these forces. The current vibrant business environment and rapid change in technology propel the SMEs to make new approaches in performing business. Strategic entrepreneurship (SE) signifies an achievable answer to the emerging issues of innovating to remain competitive and sustaining efficiency while continuously adjusting to rapid changes in the market. As such with the aim of attaining competitiveness, it is very critical for SMEs to comprehend the strategic entrepreneurship and its impact on the company performance (Bettis & Hitt, 1995; Hitt & Reed, 2000).

Within entrepreneurship and management researches, strategic entrepreneurship (SE) refers to an idea which is a comparatively novel concept. The appropriateness in integrating entrepreneurship with strategic management as well as the discrimination to other entrepreneurship linked theories namely corporate entrepreneurship, entrepreneurial orientation, entrepreneurial strategy, etc., remain the main issues and disputes among many scholars in the description of SE. Moreover according to Schindehutte and Morris, (2009) there is obscurity to treat SE as a "concept, paradigm, theory, model, framework, or an interfacing point".

To managers, it is critical to understand the real measures they can put into practice and certain factors they must concentrate to enhance the firm performance. For the Malaysian SMEs this is particularly significant because they have shortage of experience in entrepreneurship and a short history of market economy. Majority of them have very

inadequate capacity to carry out their strategies and are difficult to take on various activities without the confidence to attain positive outcomes. There is a need of an organized vision within their firm on the execution of strategic entrepreneurship indicating the integration of dynamics that could enhance the short and long term firm performance. Previous researches on SMEs particularly in Malaysia focus more on the competitive and manufacturing strategies; export market orientation; role ambiguity, competency and person-job fit; leadership styles and business model (Singh & Mahmood, 2014; Singh & Mahmood, 2013; June, Kheng & Mahmood, 2013; June & Mahmood, 2011; Aziz, Abdullah, Tajudin & Mahmood, 2013; Sumaiyah & Mahmood, 2011). Some recent studies, in the Malaysian SMEs context, have comprehensively examine how far entrepreneurial orientation, influence direct on the firm performance (Aziz & Mahmood, 2014; Shuhymee, 2009); or mediating by the market orientation (Idar & Mahmood, 2011) and competitive advantage (Mahmood & Hanafi, 2013); or as a mediator in leadership styles and performance relationship (Aziz, 2010); or with personality traits as antecedent (Zainol & Ayadurai, 2011). Nevertheless owing to the conceptual obscurity and majority focus on venture entrepreneurship (Sambasivan, Abdul & Yusop, 2009) and corporate entrepreneurship (Nayyar & Mahmood, 2014; Mahmood & Wahid, 2012), the empirical researches on strategic entrepreneurship are somewhat inadequate. Thus, this research will corroborate the empirical support on this SE topic in the context of SMEs in Malaysia.

1.2 Problem Statement

The current volatile business environment has yearned for higher scrutiny to recognize survival toolkit for SME, given that SME is highly susceptible to the dynamic and hostile

economic changes. With this situation, it is the time now to identify brilliant strategy management and entrepreneurship that may assist firm performance. Since SMEs signify 97.3 percent of business establishments in Malaysia, it is obligatory for SMEs to chip in more towards the country's GDP as they are obviously the catalyst of GDP. In 2011, SMEs contribute only 32.5 percent of Malaysia's GDP (Economic Census, 2011).

Previous studies show that two important reasons for majority of the SME failures, namely the shortage of entrepreneurial competencies among the key founder-owners (Kiggundu, 2002); and the shortage of capabilities and skills in their top management (Longenecker, Simonetti & Sharkey, 1999). Few are due to the poor or no actions taken as a result of 'non-rational' attitude of the founder-owner(s) in overseeing the business (Beaver & Jennings, 2005). In Malaysia, albeit there have been no comprehensive research or precise figures published so far, the approximate failure rate for SMEs was 60 percent (Portal Komuniti KTAK, 2006; Ahmad & Seet, 2009) which is three times to those among SMEs in Australia's (failure rate was 23 percent (Watson, 2003)). Similarly, according to Malaysia Economic Census, (2011) the productivity-levels of SMEs show remarkably lesser as compared to large corporation. Also, SMEs produced RM 0.058 million while large corporations produced RM 0.15 million of value-added in labour-productivity (Economic Census, 2011).

To reduce the growing number of SME failures, the Malaysian government has taken several actions, for example the formation of the SME Bank (in October 2005) and declaration of recent syariah-compliant SMEs financing fund totalling RM2 billion. Other supporting activities include encouraging and increasing production efficiency; enhancing

quality and productivity via automation and modernization of machinery; inviting SMEs to embark on R&D, product development, and designing activities; and creating a more favourable business environment for SMEs (Central Bank of Malaysia, 2006). Within Malaysia, the SMEs' performance is still visibly lesser than that of large corporations, despite the much attempts and money in helping them.

Government assistance, while being helpful, should not be regarded as the definite answer to alleviate the issue of business failures. There are other essential aspects that a SME must raise to maintain success. It is proposed that stressing on the business owner as the unit of analysis will develop comprehension of the experiences of entrepreneurs in conducting the business to reduce the chances of business failure (Stokes & Blackburn, 2002). According to Longenecker, Simonetti and Sharkey, (1999) when an organization does not attain the planned target, usually the most likely reason is linked to the actions of its top management and/or the founder-owner. This subsequently relay to the quality of the entrepreneurship and strategy management of the SME top management. The key topic of the entrepreneurship field is opportunity-seeking whereas the main focus of the strategic management field is competitive-advantage-seeking. Ireland, Hitt and Sirmon, (2003), feel that these two key processes should be taken as a joint force that develops as SE concept. However entrepreneurship and strategic management together are actually pertaining to two antagonistic concepts in exploration and exploitation activities that have to be performed in equilibrium and concurrently (Schindehutte & Morris, 2009). According to March (1991), exploration refers to "things captured by terms like search, variation, risk-taking, experimentation, flexibility, discovery and innovation". That is,

terms relates to innovativeness, proactiveness and risk-taking are shown in Entrepreneurial Orientation (EO) construct whereas searching, variation and creativeness to achieve market leadership have links towards Entrepreneurial Values (EV) construct. According to Nonaka (1994), to have efficient exploitation activities, firms must have superiority in their Knowledge Creation Process (KCP). All these constructs EO, EV and KCP form the research gaps for the previous studies.

Therefore, this study is to concentrate on the influence of strategic entrepreneurship (SE) which is manifested in exploration and exploitation activities that in-turn represented by EO, EV and KCP constructs, on performance of the SMEs in Malaysia. SMEs are chosen since they make up 97.3 percent of business establishments in Malaysia but in economy they contribute only about 32.5 percent of gross-domestic-product and 19 percent of total-export-value (Economic Census, 2011).

1.3 Research Questions

To address the managerial issues in problem statement with theoretical means, below research questions are therefore posed for this study:-

i). What is the relationship between Entrepreneurial orientation (EO) and the performance of SMEs?

ii). What is the relationship between Entrepreneurial values (EV) and the performance of SMEs?

iii). What is the relationship between Knowledge creating process (KCP) and the performance of SMEs?

1.4 Research Objectives

The objectives of this research are described as follows:-

i). To investigate the relationship between Entrepreneurial orientation (EO) and the performance of SMEs.

ii). To investigate the relationship between Entrepreneurial values (EV) and the performance of SMEs.

iii). To analyse the relationship between Knowledge creating process (KCP) and the performance of SMEs.

All measurements are subjected to the constraints bounded by the methodology of data collection. This study is confined to the influence of strategic entrepreneurship on performance of SMEs in Malaysia, and does not consider external factors like government policy and other internal factors like organizational structure/culture which can also influence the performance of SMEs.

1.5 Scope of Study

This study examines the relationship between firm's strategic entrepreneurship (exploration and exploitation) and the performance of the SMEs in Malaysia. The respondents of this study are consisted of owner/managers of the SMEs listed in Malaysia SMI Directory (http://www.smeinfo.com.my/index.php/en/sme-business-directory), from the four main categories namely Manufacturing (include agro-based), Manufacturing Related Services, Services (including ICT) and Construction. From this Malaysia SMI Directory, the total population is 17,016. These four main categories are chosen as they employed the largest number of workers since together they constitute a population of 14,609 or 86 percent of total population. Data is to be collected using the questionnaires that include dissimilar queries on diverse characteristics of the firm's demography, common information of the firm, composition of proprietorship, stage of business, etc.

1.6 Significance of study

This research is to concentrate on the analysis of the core dynamics and constituents representing the idea of the lately developed concept of strategic entrepreneurship and their impact on company performance. In this research, based on the analysis of current literatures and empirical researches, strategic entrepreneurship is explained by highlighting the exploration and exploitation portions of the idea.

The theoretical contribution of the research is to be related to the progression and examination of strategic entrepreneurship. It also to be treated as an important reference in future studies in exploration and exploitation, particularly with respect to strategic entrepreneurship. The findings can also be applied within the management systems of

companies that have desire in employing strategic entrepreneurship to enhance their company performance. It can also be used, hopefully by the Malaysian Government in formulating the best strategies to grow SME entrepreneurs plus helping companies to be competitive internationally by having suitable government policies.

The results of this study are to be contributing to the bulk of knowledge linked to SME's development in developing countries. It also can be utilized to assist the application of strategic entrepreneurship theories in different situations. As the government has allocated substantial huge sum of fund under Economic Transformation Programme (ETP) initiatives to develop SMEs, it is critical to observe its contribution to the economy through the continuation of the sustainable business. The ETP is an initiative by the Malaysian government to convert Malaysia into a high income economy by the year of 2020. It is handled by the Performance Management and Delivery Unit (PEMANDU), an agency under the Prime Minister Department of Malaysia.

1.7 Definition of Key Terms

Strategic Entrepreneurship (SE)

SE is defined as "the integration of entrepreneurial (i.e. opportunity-seeking behaviour) and strategic management (advantage-seeking behaviour) perspectives in developing and taking actions designed to create wealth" (Hitt, Ireland, Camo & Sexton, 2001, p. 481). However, both processes are in exploration and exploitation activities which are antagonistic but must be in equilibrium and concurrent (Schindehutte & Morris, 2009).

Exploration

According to March, (1991) definition of exploration is concentrated on the lookout for novel opportunities, experimenting and variation. It is delineated as the "things captured by terms such as search, variation, risk taking, experimentation, flexibility, discovery and innovation" (March, 1991).

Exploitation

Exploitation as defined by March (1991) is concentrated on implementing the extant opportunities, efficiently and selectively. It is delineated as "such things as refinement, choice, production, efficiency, selection, implementation, execution." (March, 1991).

Small and Medium Enterprises (SMEs)

SME in Malaysia is defined by the size of firm in terms of annual sales turnover and number of full-time employee as per National SME Development Council (NSDC, 2013) definition shown in Table 2.2.

Entrepreneurial Orientation (EO)

Entrepreneurial orientation is regarded as the company's strategic orientation, using entrepreneurial ways in decision-making, procedures, and processes. Dimensions in EO are innovativeness, proactiveness and risk-taking (Covin & Slevin, 1989).

Innovativeness

Innovativeness is defined as "any newly developed idea, practice or material artifact that is perceived to be new by the early units of adoption within the relevant environment" (Biemans, 1992).

Proactiveness

Proactiveness is defined as the company's tendency to take the initiative to compete aggressively with other firms (Covin & Slevin, 1989).

Risk-taking

Risk-taking is defined as the firm willingness in engaging projects with risk as well as inclination to invest substantial resources on the projects which are not certain on their results (Miller & Friesen, 1982).

Entrepreneurial Values (EV)

Entrepreneurial values are an intricate phenomenon consisting of the need for achievement (McClelland, 1961), risk propensity through tolerance for ambiguity (Hisrich, Michael & Dean, 2005; Gibb, 2007), perseverance (Alsaaty, 2007), self efficacy (Rotter, 1966) and persuasiveness (Busenits & Lou, 1996).

Knowledge Creation Process (KCP)

Knowledge creation process helps companies in intensifying the embedded knowledge and conveying knowledge towards more effective and value-add business operations (Nonaka & Konno, 1998). KCP involves "a spiral process of socialization, externalization, combination, and internalization (SECI)" (Nonaka, 1994). Socialization is to garner tacit knowledge. Externalization is to facilitate individuals in articulating tacit knowledge into explicit knowledge. Combination is to create novel knowledge and application with

present one. Internalization transforms this novel knowledge into company's database and operational practices.

1.8 Organization of the Dissertation

This dissertation comprises of five chapters. In Chapter One (Introduction), the key academic thoughts are explained beginning by the means toward how strategic entrepreneurship is delineated. It also elucidates issues and gives insight into the background of the problems (managerial issue) and subsequent the research questions (theoretical issues) and objectives. The chapter Two (Literature Review) of the dissertation is dedicated to the elucidation of the appropriate literatures pertaining to SMEs, Strategic Entrepreneurship and firm performance. Chapter Three (Methodology) discusses the research design, the sample used, the survey instruments and methods of analysis. Chapter Four (Findings) discusses the data analysis and the outcomes of the hypotheses testing. Chapter Five (Discussion and Conclusion) contains the discussions, contributions, limitations, the recommendations for future research and consclusion.

CHAPTER TWO : LITERATURE REVIEW

2.1 Introduction

The literature review for this study begins with the background, performance and profile of SMEs in Malaysia followed by the various theories of the growth performance of SMEs and their respective models. In the last section of this chapter, the theoretical model of strategic entrepreneurship will be established by initial description of the approaches to definition of the concept based on two perspectives, entrepreneurship and strategic management. This is followed by exploration and exploitation perspective and finally the establishment of strategic entrepreneurship model.

2.2 SMEs in Malaysia

In Malaysia, creating jobs seem to be the most important reason for advocating SMEs. Malaysia is known to be having a fast rising labour force. Whilst much of this labour force is captured in conventional agriculture sector, it is definite that most, if not a growing figure are looking for jobs in the other sectors. Such typical labour force is characterized by mainly untrained or unskilled workers. Henceforth, among other means in easing the issue of excessive labour is by bringing in programmes that will promote SMEs' development. Also this will synchronise to those policies in decreasing poverty as well as reforming society. These initiatives are especially relevant in view of the high occurrence of poverty among the Malays.

Since 1990s, Malaysia has been converting from an economy of commodity-based to an industrial products-based which is export orientated (Singh & Mahmood, 2013; Saleh &

Ndubisi, 2006). The SMEs persist to be an important player in the nation's industrialization activities via the reinforcement of both forward and backward industrial connections. The SMEs exercise their responsibilities by augmenting the programmes of the large-scale industries via merging into the mainstream industrial development. SMEs participate in the chain of supplying key components plus extending their market globally. It is predictable that with the development of SMEs, industrial foundation will be reinforced further gearing towards stronger export-led growth (Singh & Mahmood, 2013).

According to Economic Census (2011), the SMEs had constituted 97.3 percent of the total business establishments in Malaysia. Out of this total, 94.3 percent were micro and small-scale enterprises and the rest 3 percent, the medium scale enterprises. It is regarded that the SMEs in Malaysia have carried on to go through rigorous product specification, design and engineering activities, enhancement in marketing and distribution to boost their prosperity particularly to venture into international market. They are also painstakingly in developing technology build up and intensifying the calibre of labour-force via skill development, experience as well as education, taking full advantage of the benefits and incentives facilitated by the government of Malaysia (Singh & Mahmood, 2013; Sumaiyah & Mahmood, 2011; Saleh & Ndubisi, 2006).

With the global market orientation and trade liberalization as the prevailing tendency, SMEs are gearing towards putting in place the quality systems. Big corporations challenging in an ever growingly global market are dependent on SMEs to supply subcontracting services. Whilst there are noticeable trend of profound dependence on SMEs on subcontracting, larger organizations tend to concentrate more on their own core

activities. As a result, large organizations are extensively reliant on a organized group of suppliers, which comprise of mostly SMEs. With environmental dynamics which are conducive, the SMEs in Malaysia are looking forward to transcend from their current state to embark on a more significant position so as to keep up the obligations in industrialization development in Malaysia. As the nation extends its industrialization footing in facing the new millennium challenges, the significance of SMEs is going to be more prominent (Sumaiyah & Mahmood, 2011; Saleh & Ndubisi, 2006).

According to Saleh and Ndubisi, (2006) SMEs are paramount in Malaysia economy and regarded as the basis of industrialization process of the nation. Also SMEs assist in converting primary-based economy into that of industrial-service sector. SMEs' contribution in improving the country's growth of economy is being broadly acknowledged. SMEs create many job opportunities and enhancing the economic output (Singh & Mahmood, 2013; Sumaiyah & Mahmood, 2011).

According to Economic Census (2011), albeit accountable for 97.3 percent or 645,136 of business establishment in 2010 and provide work for 3,669,259 workers, SMEs involvement in the economy is still pale in comparison with large enterprises. Table 2.1 below illustrates the establishment of business, employment as well as labour productivity in value-added, of SMEs in Malaysia. By and large, the SMEs' productivity is a lot lesser than large enterprises. In big contrast on the labour-productivity, SMEs produced RM 0.058 million value-added whereas large enterprises produced RM 0.15 million of value-added.

Table 2.1
Business establishment, employment and productivity of SMEs and large enterprises

Description	Small Medium Enterprise	Large Enterprise
Business Establishment	645,136 (97.3 percent)	17,803 (2.7 percent)
Employment	3,669,259	1.6 00,000 (Census, 2005)
Labour Productivity		
Value-added	RM 0.058 million	RM 0.15million

Source: Economic Census (2011), Department of Statistics, Malaysia

Owing to not having adequate management capabilities amongst owners or managers SMEs are badly handled (Mimiliana & Amin Mahir, 2008). They usually neglect the significance of taking on superior management structures and top business methodology, for example customer orientated programmes and monetary management, so as to improve profitability and productivity.

According to the National SME Development Council (NSDC) a SME in Malaysia is defined by the size of firm in terms of annual sales turnover and number of full-time employee. In 2005, NSDC had released the definition (NSDC, 2005) to be adopted by all Government Ministries and Agencies involved in SME development as well as by the financial institutions (Bank Negara Malaysia, 2005). Below is the definition (NSDC, 2005):

- "Manufacturing (including agro-based) and Manufacturing-related Services: Sales turnover of less than RM25 million OR full-time employees of less than 150
- Primary Agriculture and Services (including ICT): Sales turnover of less than RM5 million OR full-time employees of less than 50"

Owing to the many changes and developments in economy since 2005, for example price inflation, structural and business trends variations, NSDC had reviewed and come out a new definition of SMEs (NSDC, 2013) in October 2013. Below is the simplified definition (NSDC, 2013):

- "Manufacturing: Sales turnover not exceeding RM50 million OR full-time employees not exceeding 200 workers
- Services and other sectors: Sales turnover not exceeding RM20 million OR full-time employees not exceeding 75 workers"

The new definition of SME is on the basis of number of full time employees or annual sales-turnover, as shown in following Table 2.2 (NSDC, 2013).

Table 2.2
New Definition of SMEs in Malaysia by size of operation

Category	**Micro**	**Small**	**Medium**
Manufacturing	Sales turnover less than RM300,000 OR full-time employees less than 5	Sales turnover from RM300,000 to less than RM15 million OR full-time employees from 5 to less than 75	Sales turnover from RM15 million to not exceeding RM50 million OR full-time employees from 75 to not exceeding 200
Services & other Sectors	Sales turnover less than RM300,000 OR full-time employees less than 5	Sales turnover from RM300,000 to less than RM3 million OR full-time employees from 5 to less than 30	Sales turnover from RM3 million to not exceeding RM20 million OR full-time employees from 30 to not exceeding 75

Source: NSDC (2013)

Within the three primary economic segments of manufacturing, services and others, SMEs in Malaysia are responsible for 97.3 per cent or 645,136 of the total establishments, and 17,803 large enterprises make up the rest 2.7 per cent. Majority of the SMEs are

established in the services sector, which is about 90 per cent (Economic Census, 2011). The job generated by Malaysia's SMEs was 3,669,259 workers (Economic Census, 2011) as compared to large enterprises 1,600,000 workers (Census, 2005). SMEs are mostly located in the Central Region (Federal Territory of Kuala Lumpur and Selangor), amounting to 32.6 per cent. Next come to Johor state with 10.7 per cent and the rest of other Malaysian states, smaller than 10 per cent (Economic Census, 2011).

SMEs in Malaysia are majority micro in sizes, constituting 77% of total SMEs in 2010 (2003: 79.3%). Small-sized enterprises form by 20%, while medium-sized enterprises accounted for the remaining 3% (please see below Table 2.3).

Table 2.3
Number of establishment and Percentage share of SMEs by firm size

	Census of Establishments and Enterprises 2005 (Reference Year 2003)				**Economic Census 2011 (Reference Year 2010)**			
	Micro	**Small**	**Medium**	**Total**	**Micro**	**Small**	**Medium**	**Total**
Number of establishments	434,939	100,608	12,720	548,267	496,458	128,787	19,891	645,136
Percentage share to total SMEs, %	79.3	18.4	2.3	100	77.0	20.0	3.0	100
Percentage share to total establishments, %	78.7	18.2	2.3	99.2	74.9	19.4	3.0	97.3

Source: Census of Establishments and Enterprises 2005 and Economic Census 2011, Department of Statistics, Malaysia

Note: This is to take note that effective 1st January 2014, to make possible transition to a high income economy, the new definition for SMEs (NSDC, 2013) via the initiatives under the Malaysian SME Masterplan is being adopted. The new definition is likely to cause more firms being recognized as SMEs, especially from the services sector (SMECorp Malaysia, 2013).

2.3 Theory of the Growth Performance of SMEs and Models

The previous section examines the rationale of advocating SMEs and the firm performance of SMEs in Malaysia. The subsequent first section here concentrates on the literature on SMEs' measurements. The second section re-examines the models and previous research on the pertinence of the growth performance of SMEs.

According to Robinson, (1982) and Young, (1985) an enterprise is reckoned to be any corporation involved in an economic activity regardless of its legitimate structure. This comprised, especially, sole-proprietorships plus family-businesses involve in crafting or other endeavour, as well as partnerships and alliances that frequently involve in economic undertaking.

Different countries have different definitions of SME. According to Penrose, (1995) and Jensen, (2000) the Europe SMEs' classification is comprised of firms that have less than 250 full time employees as well as which has either an annual balance-sheet total not more than 43 million Euros or an annual-turnover not more than 50 million Euros.

According to Penrose, (1995) and Jensen, (2000), the pitching on building up SMEs takes a top position in the economic development agenda of many developing nations in the world. Barney, (1991) feels that for some developing nations, this pitching turns out to be fundamentally part of the entire country economic development schemes.

Penrose (1995) also expressed that it is essential to make a distinction among SMEs. It is required to distinguish between micro enterprise and small enterprise. That is the micro enterprise is outlined as an enterprise which has lesser than 10 full-time employees and

whose annual turnover or annual balance sheet total less than 2 million Euro. The small enterprise is taken as an enterprise which has lesser than 50 full-time employees and whose annual turnover or annual balance sheet total less than 10 million Euro.

However, the definition of SMEs is still not free from obscurity. Based on their intentions, different nation employs different measurement methods to decide SMEs (Kirby, 2003; Ngasongwa, 2002; Hashim & Abdullah, 2000). Depending on the firms' features, the qualitative as well as quantitative measurements could be employed to gauge SMEs (Hanchuan & Zhongqi, 2000; Waston & Everett, 1998; Ueda, 1995).

To evaluate small and informal business, Ueda, 1995 treat it as family-owned having small-scale activity, labour-incentive and low skill labour. On the other hand, Watson and Everett (1998), compute small business by having the business that employs one or two individuals to carry out all the key business operations with no experts. Nevertheless, the qualitative measurement of SMEs is still obscure for some practices among the experts. As such, according to Latif, Khan, Abdullah and Ali, (2000) majority of the nations in Asia and Europe have switched to evaluate SMEs dependent on quantitative methods using either employments, capitalization/assets or annual turnover.

With effect in January 2014, the Malaysian Government, via the National SME Development Council (NSDC) (the top policy making entity to map future strategies and direction for SMEs development) classifies the new definition of SMEs in Malaysia (NSDC, 2013). SMEs are defined based on several sectors according to number of full time employees or annual sales-turnover shown in Table 2.2 in previous section 2.2.

In 1995, China amends and implements its SMEs definition. SMEs are defined as a firm engages in the area of agriculture, utilities, commerce, transportation, storage, communications, finance, real estate, and other variety of services with the annual sales value of not more than RMB80 million and with the lesser than 50 full-time employees. SMEs are defined as a firm engages in the area of manufacturing, construction, and mining, with the capital of not more than RMB60 million and lesser than 200 full-time employees (Lin, 2002). Comparable to China, Japan and South Korea defined SMEs according to the different types of businesses as shown in Table 2.4 (Hanchuan & Zhongqi, 2000) below.

Table 2.4
SMEs Definition in Japan and South Korea

Japan's SME Definition		
SME Characteristic	**Number of Employees**	**Amount of capital**
Manufacturing, Mining, Services & Construction.	From 1-300 people	From JY 1-100 million
Wholesale, Trading	From 1-100 people	From JY 1-30 million
Retailing, Service trading	From 0-50 people	From JY 1-10 million
South Korea's SME Definition		
SME Characteristic	**Number of Employees**	**Amount of capital**
Manufacturing, Mining, Services .	From 1-300 people	From W 1-500 million
Construction	From 1-200 people	From W 1-500 million
Retailing, Service trading	From 1-50 people	From W 1-200 million
Retailing, Service trading	From 0-20 people	From W 1-5 million

Source: Hanchuan, L.; Zhongqi, W. (2000). "A research on the definition of SMEs". In Z. Zhonglu, G. Guo, Z. Yikun (Eds.), The development and supporting system for SMEs in Asia-Pacific countries in the 21st century.

The number of employees, capital sizes, and annual turnover, is the main instruments of SMEs measurement in many nations within Asia, North America and Europe. The European Commission/European Union (EC/EU) defines those enterprises that employ not more than 499 employees as SMEs (EC, 2005). However; micro-enterprises, are those

that recruit not more than 10 employees; small-enterprises, are those that recruit from 10 to 50 employees; and medium enterprises are those enterprises that recruit from 51 to 499 employees.

Hanchuan and Zhongqi (2000) also perform a study on SMEs definitions among nations in European Union, UK, Canada and the United States. They declare on the SMEs definitions in these nations as shown in the Table 2.5 below.

Table 2.5
SME Definition in Western Countries

US, Canada and European countries SME Definition		
Countries	**Number of Employees**	**Annual turnover**
United States	From 1-500 people	US$1-1billion
Canada	From 1-500 people	C$ 1-20 million
European Union, UK	From 1-499 people	Euro 1-50 million

Source: Hanchuan, L.; Zhongqi, W. (2000). "A research on the definition of SMEs". In Z. Zhonglu, G. Guo, Z. Yikun (Eds.), The development and supporting system for SMEs in Asia-Pacific countries in the 21st century plus EC, (2005).

Nevertheless, in conclusion, Latif et al. (2000) feel that the literature gives no agreement on the definition of SMEs. In majority of the nations, different definitions are according to the number of employees, capital investment or the amount of sales. Hanchuan and Zhongqi, (2000) indicate that "since SMEs are not homogenous, it is useful to distinguish it in size or the numbers of employees", as shown in below Table 2.6.

Table 2.6
SMEs Definition Base on the Numbers of Employees

SMEs Definition based on Employee number			
Micro	**Small**	**Medium**	**Large**
0-19 people	20-100 people	101-500 people	> 500 people

Source: Hanchuan, L.; Zhongqi, W. (2000). "A research on the definition of SMEs". In Z. Zhonglu, G. Guo, Z. Yikun (Eds.), The development and supporting system for SMEs in Asia-Pacific countries in the 21st century.

As such, dependent on the experiences of SMEs all over the world, the IFC and the World Bank Group-SME (2002) declare its own SMEs definition in direction of a common objective for nations around the globe. The implementation is to determine SMEs growth based on regional integration, country development, social balance, income generation, employment as well as for international development (Table 2.7).

Table 2.7
The Common Global SMEs Definitions of the World Bank Group-SME and IFC

The Common SMEs Definition of World Bank and IFC			
SME Characteristics	**Number of Employees**	**Capital Investment**	**Annual turnover**
Micro enterprise	Less than 10 people	Less than US$100,000	Less than US$100,000
Small enterprise	From 10-50 people	US$100,001 to US$300,000	US$100,001 to US$300,000
Medium enterprise	From 51-300 people	US$300,001 to US$1,500,000	US$300,001 to US$1,500,000

Source: IFC, World Bank Group-SME, (2002). "Review of small business activities". Washington DC: Jarboe Printing Company.

2.3.1 Past Research Models on the Growth Performance of SMEs

Following are the past research models on the growth performance of SMEs based on the years of publication in the ascending order.

2.3.1.1 Gibb and Davies SMEs Growth Model

To build up enhanced comprehension of the business growth performance model, Gibb and Davies (1990) make an effort by using four variables that they considered to have impact on the growth performance of SMEs. The first variable termed "personality", as a number of researchers allege that it is related to business growth performance. Researcher like Janssen (2006), on the other hand, disputes that this variable is not a valuable

predictor of business growth performance and is probably considered moderate only for a business to be doing well. Other researchers (Ireland & Webb, 2007; Alsaaty, 2007; Hisrich, Michael & Dean, 2005) instead, propose adopting the entrepreneurial values rather than personality traits as one of the significant variables of business growth performance.

The second variable is the management variable. According to Gibb and Davies, (1990) it should be taking into account of the functions of the leadership behaviour, networking, entrepreneurial abilities, as well as organizational-style, which have a negative or positive impact to the SMEs' growth performance. The third variable is a regional variable which the scholars discover the SMEs' growth performance is relied to the marketplace performance for instance, the knowledge pertaining to the concept in market, finance, as well as operating efficiency.

The fourth variable is named as the market-led variable by Gibb and Davies (1990). This variable has an influence on external factors for example market environment and supporting policies that can give rise to restrains and opportunities on the growth performance of SMEs. Nevertheless, the researchers have failed to have significant findings from their model testing. Thus it still remains in the uncertain phase and that they prepare to surrender it in the conference proceeding.

2.3.1.2 Hay SMEs Growth Model

Hay (1992) establishes seven variables which have restraints on the growth performance of SMEs. He believes that if the firm can get rid of these seven variables, it is likely for

the company to have improved growth performance. The first variable is financial control, where company cannot be run efficiently if it depends upon external financing and have little in financial control. The second variable is managerial control where there is obscurity in designation of tasks and responsibilities, coordination, accountability, and governing of the company.

The third variable is the managerial style that regards as messy in organizational structure and participation in every area of the company. The fourth variable is managerial capacity where most owner-manager of SMEs inadequate in expertise and competence with regards to knowledge of the business approach, product ideas, employees, finance, marketing and management team.

The fifth variable is market opportunity where extrinsic factors for example the absence of market growth and circumstances favouring the growth performance of company. The sixth variable is customer variable where there is inadequate affiliation with the customers as well as understanding of their requirements. Finally, the seventh variable is concern with irregularity in transformation or conversion within both the physical and human resource that result in distress to the growth performance of company. Hay (1992) indicates that if these issues are eliminated, then the company is supposed to excel in its growth performance. But, he has not had an opportunity to illustrate his analysis of the model in a big test population. Instead, his finding is still in the stage of pilot run of the model.

2.3.1.3 Adams and Hall's SMEs Growth Model

Adams and Hall (1993) chose those variables that are highly prone to have impact on the growth performance of SMEs and modelling them for regression. The authors regard the internal variables as the activity of those factors within the firm that will influence on the firm growth performance. The researchers point out that with good grasp of these factors that exist within the firm will improve the firm growth performance.

Adams and Hall (1993) regard the external-variable to be the environment within which SMEs are running. The external-environments comprise of social, economic, political and legal situation, as well as the market features. The authors think that with good grasp of the situations in the business environment will bring about enhanced growth performance of SMEs. The researchers also speak about that the personal variables for instance the aptitude, the entrepreneurial skills, knowledge, experiences, enthusiasm and goals of those top managements will assist in company growth performance.

Adams and Hall (1993) also elucidate that if the constituents in each variable (internal, external, and personal variable) become negative, the company will face problem in enhancing its growth performance. As such, to analyse and forecast which parts in the variables that have impact on the growth performance of SMEs, the preliminary SMEs growth performance model has been described by the regression model: $gi = \alpha 0 + biXi1 ... +bkXkn + \mu i$ with gi denotes the growth performance of SMEs regression model and Xi1 ... Xkn refer to variables that affect the growth performance of SMEs either positive or negative. The authors also carry out comprehensive study among companies in Europe.

However, there is yet to have enough studies performed for companies in developing countries in Asia.

2.3.1.4 Romano and Ratnatunga SMEs Growth Model

Romano and Ratnatunga (1995) build up a conceptual framework that includes the independent variables namely internal, external, and management contextual variables that concurrently impact on the growth performance of SMEs.

In the model by Romano and Ratnatunga (1995), the variables are resembled to that in the model by Adams and Hall (1993), but vary in a few constituents of every variable. In the model, the researchers insert the formal planning and control system as the mediating variable inside the three key contextual variables that predicting on the SMEs growth performance. The idea is to determine whether this mediating variable is promoting or demoting the company growth performance.

In the conceptualized framework, Romano and Ratnatunga (1995) have concentrated on the approaches in which the relationship between contextual variables and/or formal planning and control that might influence the company growth performance, as shown in below Figure 2.1. However in their hypotheses, Romano and Ratnatunga (1995) are still incapable to tackle the main issues of the SMEs growth performance with the credence of their impact.

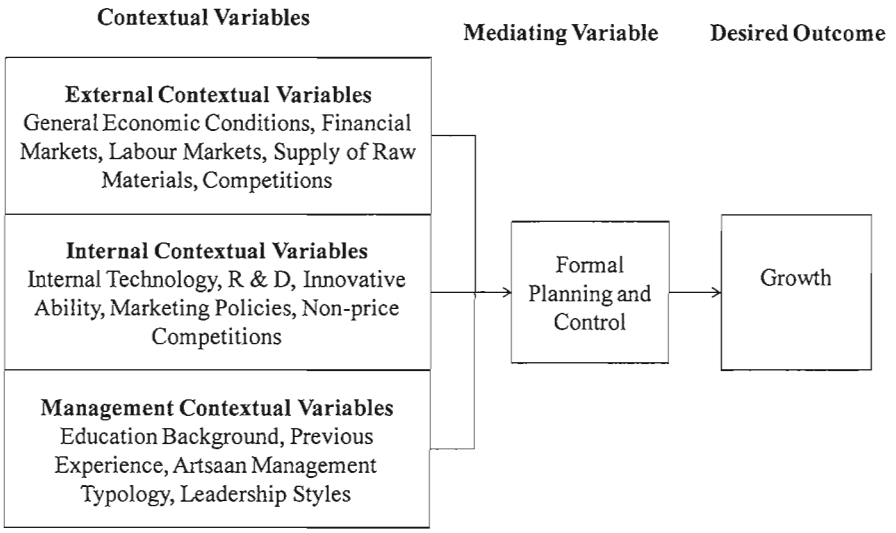

Figure 2.1
Growth Contextual Variables and Growth via Formal Planning

Source: Romano & Ratnatunga (1995). Effects of formal planning and control on growth: A case study approach. Journal of Enterprising Culture, 3(2):161-195.

2.3.1.5 Kolvereid and Bullvage's Model

Kolvereid and Bullvage (1996) survey on several variance of growth performance models of SMEs prior they come to their own particular growth performance model. Gibb and Davies (1990) model, which has been examined at the earlier part of this section, was the most appealing model that Kolvereid and Bullvage (1996) refer for deliberation.

With reference to a few promising model of other researchers for example Gibb and Davies (1990), Kolvereid and Bullvage (1996) have come to their particular conceptual SME growth performance model as shown in Figure 2.2 below. In their recommended model, Kolvereid and Bullvage (1996) count on the attributes of the owner/manager, the organization, and the environmental variables as the independent variables with the

entrepreneur growth intention as the mediating variable that subsequently influences the ultimate growth performance of SMEs.

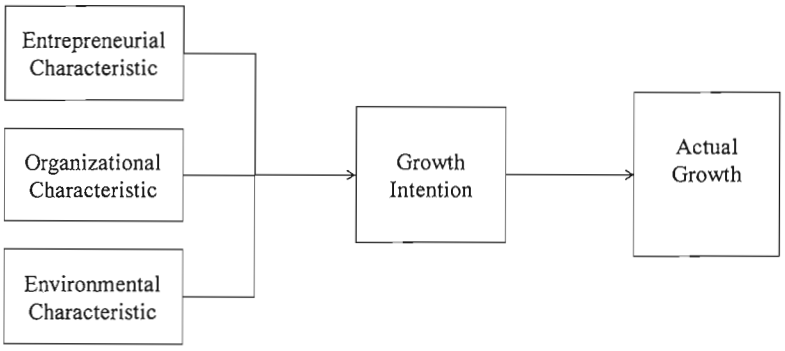

Figure 2.2
The Conceptual Model of Growth in Entrepreneurial Organizations

Source: Kolvereid & Bullvage (1996).Growth intentions and actual growth: The impact of entrepreneurial choice. Journal of Enterprising Culture, 4(1):1-17.

2.3.1.6 Petrakis's SMEs Growth Model

Petrakis (1997), discovers that entrepreneur abilities and mind-sets, resource-needs, market opportunities and its structural forms, and incentives role as the variables which might impact on SMEs' growth performance. The author indicates that the function of entrepreneurial abilities and mind-sets/attitudes variable are regarded as the road blocks to the SMEs' growth performance. Take for instance, limitations of entrepreneurial abilities and mind-sets/attitudes in adapting with volatility in product, technology as well as market.

For resource needed variable, Petrakis (1997) elucidates insufficient in funding workforce and technology is inhibiting the SMEs growth performance. For the market opportunities and structure variable, the author describes that the mass market for SMEs products and

the market structure generate a lot of issues for the SMEs growth performance. For the role of incentive, the shortage of the exact policies, supporting activities and other incentive initiatives by the nation can cause SMEs struggle to engage in their appropriate roles. Nevertheless, Petrakis (1997) does demonstrate the main issues on the SMEs growth performance in his study results, except that he fails in articulating on what way those issues affect the SMEs growth performance.

2.3.1.7 Herri's SME Growth Model

Herri (2003) illustrates the variables' relationship and employs them within his research-framework depending the resource-theory and contingency-theory. To be precise, the relationship is between "personality values, business strategy, environmental uncertainty, and company performance" as shown in below Figure 2.3.

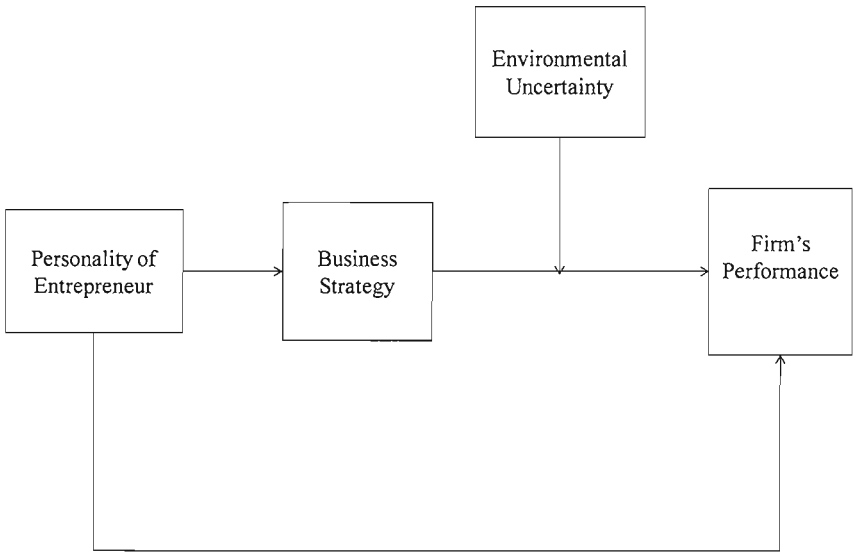

Figure 2.3
Herri's Firm Performance Model

Source: Herri, (2003). Analysis of Factors Influence the Performance of Indonesian Small and Medium Enterprises (A Resource-Base Theory Approach).

To investigate the hypotheses of the study, 300 respondents who are SMEs entrepreneurs from variety of manufacturing industries in Indonesia have been employed.

From the findings of the hierarchical regression, Herri (2003) deduces business strategy is a mediator to the relationship between entrepreneurial personality-values and company-performance. In turn, environmental-uncertainty is a moderator to the relationship between business-strategy and company-performance.

It is clarified that in the resource based theory, company resources are key reasons which decide competitive-advantage as well as profitability (Davidson, 2000). Among other distinctive resources company probably own is the entrepreneurial personality values. Personality values affect business strategy that give rise to competitive advantage. SME's performance is controlled by environmental uncertainty. As such, the contingency theory is employed by Herri (2003) to describe the relationship between business strategy and company performance.

In Herri's (2003) study, the size of SMEs being employed is companies that have the number of employees ranging 1 to 99. Information for the choice of companies is originated from the Directory of Manufacturing Companies in 2001. The figure of companies classifies as SMEs is 15,593. Four provinces regarded as the central of the manufacturing firms in Indonesia is located in DKI Jakarta, West Java, Middle Java, and East Java with the total figure of companies 12,326. These four provinces can be treated as a model of small and medium size manufacturing companies in Indonesia.

Owing to the constraint in time and cost, 300 companies are chosen as the sample via purposive random sampling. According to Herri, (2003) the "snow ball" methodology is employed in choosing the sample companies and accomplishes the specification delineated by the definition of SMEs based on the Central Bureau of Statistics in Indonesia.

Herri (2003) points out that business strategy is an incomplete mediating variable between personality values and company performance. In other words, company performance is not only subjected to the straight impact by personality values but also affected by business strategy. The entrepreneurial personality values comprises the unhappiness of what one has endured, forever strengthen one's performance, strong self-believer in one's job, and risk-taking. As such, these values impact on the fulfilment of the company business strategy links to the environmental condition being exposed to by the company. According to Herri, (2003) personality values also provide a positive impact with regard to the execution of the business strategy and the company attains competitive advantage and profitability.

2.3.1.8 Simpson, Padmore and Newman's SME Growth Model

To allow the identification of critical-success-factors (CSFs) in future study of SMEs, Simpson, Padmore and Newman (2012) come out a theoretical framework which relates success and SMEs' performance. To be exact, they relate CSFs, success and performance definitions to the business environment attributes, the owner-manager traits and the business features. Within this model, a somewhat novel concept which could change the

owner/manager's tactical/strategic behaviour was introduced where performance has a feedback link to the enterprise attributes, as shown in below Figure 2.4.

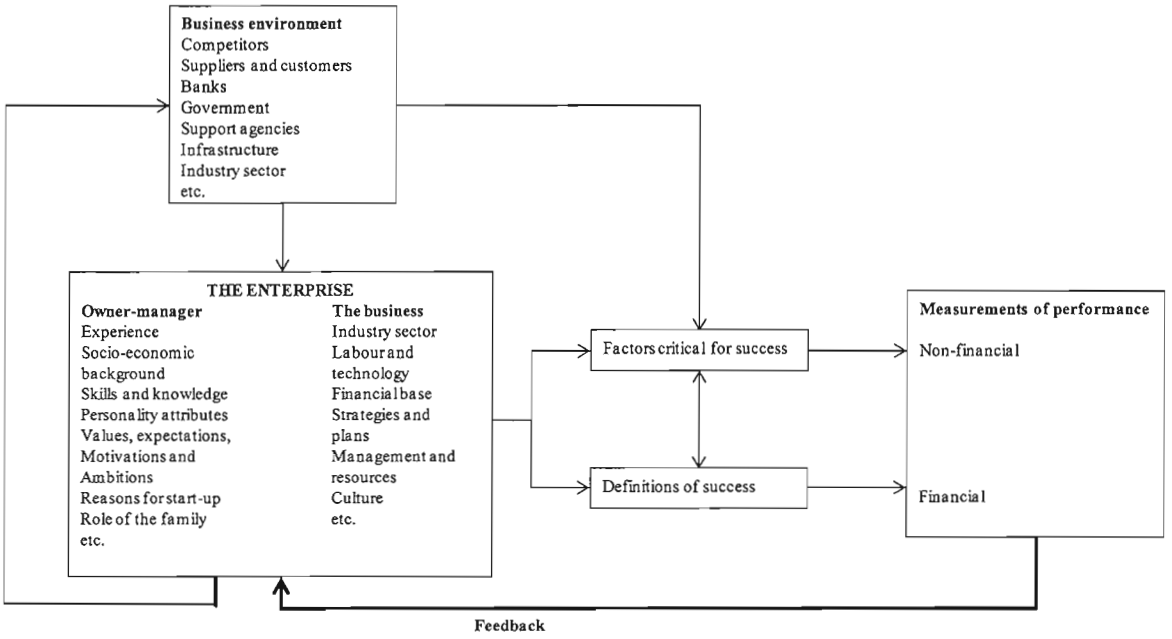

Figure 2.4
Defining success - theoretical relationships

Source: Simpson, Padmore & Newman, (2012). Towards a new model of success and performance in SMEs.

Apart from literature review, based on the researchers' experience, a thorough interview and knowledge evocation activities were performed with the owner/managers. Their framework provides a dissimilar approach to those who practise and advise business strategies during the consideration of SMEs' critical-success-factors. However, to establish CSF, those research issues faced in SMEs' performance researches still persist in this present framework. With regard to these concerns, it is therefore suggested that a longitudinal approach to be carried out for future study.

In summary, it is apparent that from the growth performance models of SMEs by Romano and Ratnatunga (1995), Adams and Hall (1993), Hay (1992), Gibb and Davies (1990), Kolvereid and Bullvage (1996), Petrakis (1997), Herri (2003), Simpson, Padmore and Newman (2012); the factors influencing on the SMES growth performance are diversified in all realms and there is no indication of common trend or consensus, as shown in Table 2.8 below. This is somehow coincides with Gibb and Davies (1990), who indicate in their wrap-up that "there is no comprehensive theory of SME development which clearly brings together all the relevant parameters into a model and indicates how each part interacts with each others." It is therefore with this situation the researcher feels that there is a need to study on a novel model of SMEs growth performance using concept of strategic entrepreneurship.

Table 2.8
Summary of Past SMEs Growth Performance models

No.	Growth Performance Model of SMEs	Year	Independent Variables	Mediator Variable	Moderator Variable	Status
1.	Gibb and Davies	1990	Personality, management, regional, market-led.	-	-	Still in uncertain phase.
2.	Hay	1992	Financial control. managerial control, managerial style, managerial capacity, market opportunity, customer variable, irregularity in transformation.	-	-	Still in the pilot run.
3.	Adams and Hall	1993	Internal, external, personal.			Lack of study in Asia.
4.	Romano and Ratnatunga	1995	External, Internal, management contextual variables.	Formal planning & control	-	Still fail to tackle main issues.
5.	Kolvereid and Bullvage	1996	Entrepreneurial, organizational & Environmental characteristic.	Growth intention	-	-
6.	Petrakis	1997	Entrepreneur abilities & attitudes, resource needs, market opportunities & structure, role of incentives.	-	-	Fails in articulating the effect of variables.
7.	Herri	2003	Personality of entrepreneur.	Business Strategy	Environmental Uncertainty	-
8.	Simpson, Padmore and Newman	2012	Business environment, owner-manager and business characteristics.	Critical success factors (CSF), definition of success.		Problems to establish CSF still exist.

2.4 Strategic entrepreneurship theoretical model

The comparatively fresh phrase strategic entrepreneurship is coined within researches by Hitt, Ireland, Camo and Sexton (2001); Hitt, Sexton, Ireland and Camp (2002); and Ireland, Hitt and Sirmon (2003). According to Hitt et al., (2001) it combines both the entrepreneurship and strategic management researches and focus on the firm ability in adopting "strategic actions entrepreneurially and entrepreneurial actions strategically".

The idea can be clarified via first the entrepreneurship and strategic management views, and a review of how they evolve and subsequent establish the concept of strategic entrepreneurship.

2.4.1 Entrepreneurship View

According to Wickham, (2001) and Landström, (2005) the word "entrepreneurship" emerges from French language centuries ago and the French word entreprendre is a person who is active and starts up certain business-linked endeavour.

For the past 25 years, it is observable that the discipline of entrepreneurship study has been developed significantly. The origination of entrepreneurship study is connected with the research by Joseph Schumpeter with regard to the idea of company innovativeness and "creative destruction" (a term coined by Joseph Schumpeter (1883–1950)). According to Gregoire, Noel, Dery and Bechard, (2006) at the advent of 1980s, entrepreneurship was treated pretty restricted only on personality psychology. It was later extended toward economic, organization and sociology researches which subsequently spread all over the other subjects. In the period of 1993 to 1998, the entrepreneurship researches were

gearing towards to the resource-based view of the company which subsequent turn out to be the combination of entrepreneurship and strategic management and studies. Under this backdrop, contemporary entrepreneurship study has a propensity to be rooted in the four classic founders of entrepreneurship namely Joseph Schumpeter (1883-1950), Israel M. Kirzner (1930-), Frank Knight (1885-1972) and Jean Baptiste Say (1767-1832). They are also attributed four dissimilar versions of entrepreneurship, namely; innovator/creative destructor, arbitrageur, decision-maker and co-ordinator (Henrekson & Stenkula, 2007) as shown in below Figure 2.5 .

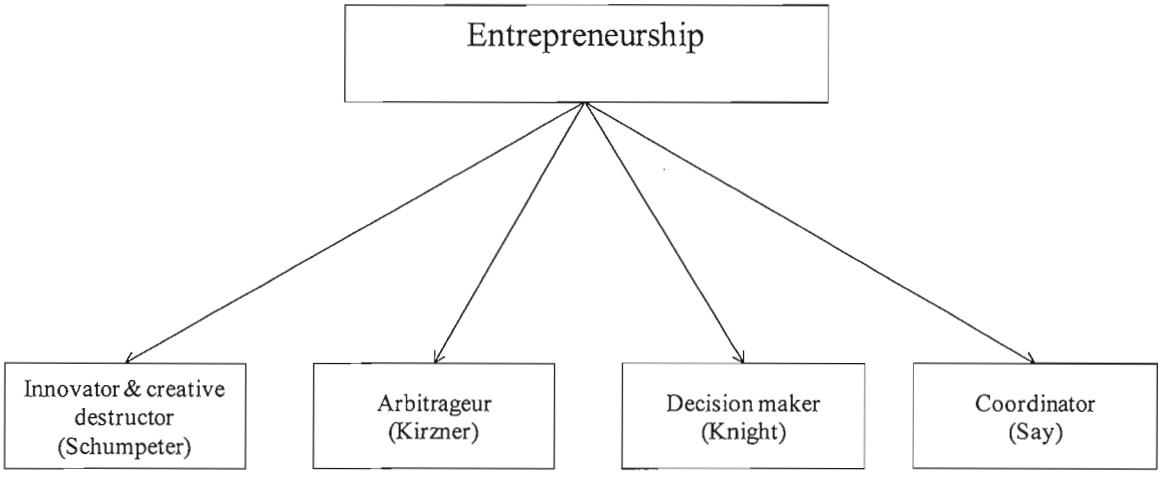

Figure 2.5
Four basic versions of entrepreneurship

Source: Henrekson & Stenkula (2007:31)

Henrekson and Stenkula (2007) declare that recent contributions in this field are usually variance or analytical worldliness of these four versions of entrepreneurship, or have a more extensive manner so as to attempt and merge the different roles. To get insights of how researchers poise strategic entrepreneurship as a concept in the field, the researcher

put these four fundamental versions of entrepreneurship corresponding to strategic entrepreneurship (SE) study.

2.4.1.1 Schumpeter version of entrepreneurship

Schumpeter (1934) created the notion of innovation and creative destruction to entrepreneurship theory, and he views the entrepreneur primarily as an innovator who spots and initiates novel innovative combinations. In this manner, the entrepreneur, according to Schumpeter, (1934) is considered to be a disequilibrium creator and creative destructor. A lot of strategic entrepreneurship (SE) researchers have inclination to associate their thought with innovation. For instance, Hitt et al., (2001) mention creative destruction with respect to radical innovations which are brought into the market. One more illustration is by Ireland and Webb (2007) who declare the following:

> "New products, new processes used to produce products, and new ways to structure a firm to facilitate innovation are all examples of newness that SE [strategic entrepreneurship] can produce (p. 52)"

According to Schumpeter, (1934) a static and a changing system are two idiosyncratic and dissimilar systems of economic activities. The static system portrays the static circular capitalist system, where the entrepreneur has a significant role in a changing system. As such, the entrepreneur is the holder of the "mechanism for change" (Schumpeter, 1934:61 note 1). Schumpeter (1934) therefore describes change, development or entrepreneurship as:

> "[...] the carrying out of new combinations (p. 66)"

According to Schumpeter, (1934) these "new combinations" may not definitely be novel products or services, but can be refer to new markets, resources, production means and organisations or different forms of organisation. It is likely to declare that Hitt et al. (2001) based on these ideas that they derive a unique subject of strategic entrepreneurship and emphasize the following:

> "For the purposes of the research included in this special issue, we define entrepreneurship as the identification and exploitation of previously unexploited opportunities. As such, entrepreneurial actions entail creating new resources or combining existing resources in new ways to develop and commercialize new products, move into new markets, and/or service new customers (p. 480)"

It is amusing to see in the excerpt by Hitt et al. (2001) that they do not associate entrepreneurship via a Schumpeter's version of entrepreneur during the talk about the entrepreneur as a bearer of change. This is because similar to many other strategic entrepreneurship researchers, they prefer to have company as the unit of analysis in the study of entrepreneurship (see e.g. Hitt et al., 2001, 2002; Ireland et al., 2003; Kuratko & Audretsch, 2009), instead of individual. However, there are researchers who attempt to raise question on this notion of entrepreneurship with company level as the unit of analysis. For instance, Holcomb, Ireland, Holmes and Hitt, (2009, p. 168) challenge by pursuing past work by Schumpeter and:

> "[...] broadly define entrepreneurial action at the individual level as those behaviours that are thought to be novel in nature and to involve "new combinations," including the five forms expressed by Schumpeter (1934, p. 66)."

In short, strategic entrepreneurship researchers have propensity for deriving the thought of the Schumpeterian role about entrepreneurship via novel resource combinations, and the concept of innovation (see e.g. Hitt et al., 2001, 2002; Ireland et al., 2003; Kuratko & Audresch, 2009). Majority of researchers, nevertheless, do not poise their study in unison with the Schumpeterian version of individual entrepreneur as the carrier of change (see e.g. Hitt et al., 2001, 2002; Ireland et al., 2003; Kuratko & Audretsch, 2009), but rather, the company level as the unit of analysis.

2.4.1.2 Kirzner version of entrepreneurship

Different from Schumpeter (1934), Kirzner (1973) prefers to emphasize the arbitrageur, the "equilibrium creator", who seeks and exploits on unexploited business opportunities. These opportunities do not have to originate from something really novel; but also can be from imitations. A lot of researchers in strategic entrepreneurship prefer to derive partly the thought from the role of Kirzner in entrepreneurship that is as the arbitrageur who seeks opportunities from changes. As such, in a lot of the studies, change is imperative as a perspective, however, the scholars have inclination to centre their attention on company's responses to change instead of they, the entrepreneur 'pushing' the market change, as in the role of Schumpeter. A good illustration of this thought is by Hitt et al. (2001) when articulating the following:

> "While the fields of strategic management and entrepreneurship have developed largely independently of each other, they both are focused on how firms adapt to environmental change and exploit opportunities created by uncertainties and discontinuities in the creation of wealth (p. 480)"

Others like Ireland and Webb (2007) put across the following:

> "[...] we believe that effective SE [strategic entrepreneurship] helps a firm position itself such that it is capable of properly responding to the types of significant environmental changes that face many of today's organizations (p. 50)"

As Kirzner (1973) does not buy in the supposition of complete information, he differs with neoclassical economics regarding the presence of equilibrium. Albeit a condition of equilibrium will never be attained, the entrepreneur is credited for the progress leading to economic equilibrium by seeking existing opportunities (Kirzner, 1973). The unequal sharing of information is important to Kirzner's thought on entrepreneurship. The economy is portrayed as a process symbolized by "discovery and learning". The entrepreneur exploits on the unequal sharing of information, and attempts to yield from the superior information and knowledge they own. For instance, Agarwal, Audretsch and Sarkar, (2010) give their thought on discovery:

> "Knowledge spillovers can be viewed as involving either the creation of new entrepreneurial opportunities or else the discovery of (existing) entrepreneurial opportunities that had not been recognized previously (p. 275)'

Other illustration is by Mathews (2010) who describe:

> "I see strategic opportunity as being equated with the discovery of an entrepreneurial opportunity where a mismatch between prices and values (as seen from the perspective of the firm with its idiosyncratic bundle of resources) leads to the formulation of a business project that will actually test whether the opportunity is real or not (p. 238)"

In addition, Kyrgidou and Petridou (2011) share their thoughts about opportunity discovery:

> "The entrepreneurial components of strategic entrepreneurship (entrepreneurial mindset and creating innovation) require investments in processes underpinning experimentation, play and discovery (p. 700)"

Kirzner (1973:35) created a key thought to entrepreneurship - alertness. Having entrepreneurial alertness refer to those with the capability to recognize when novel products or services turn out to be possible or when current products or services turn out to be all of a sudden precious to consumers. Entrepreneurial alertness is said to be aroused by the desire of generating wealth (namely growth and profitability in majority) and the hunting of entrepreneurial opportunities. To Kirznerian, this signifies alertness to already current but up to now broadly overlooked changes (Kirzner, 2009). The acumen arising from entrepreneurial alertness notifies the quest for entrepreneurial opportunities plus inspiring the growth of an entrepreneurial leadership and entrepreneurial culture in a company. That is, according to Kirzner, (2009) entrepreneurs' acumens affect the

exploration of marketplaces in which the acumen can be useful via novel products or services. For example with regard to strategic entrepreneurship, Ireland et al. (2003) have thought in alertness and declare the following:

> "The flash of superior insight resulting from entrepreneurial alertness informs the pursuit of entrepreneurial opportunities as well as stimulates development of an entrepreneurial culture and entrepreneurial leadership in a firm. In slightly different words, entrepreneurs' insights influence the search for markets in which the insight can be applied through new goods or new services. [...] Those with keen entrepreneurial alertness demonstrate a strong entrepreneurial mindset. Competence exploration widens the range of activities a firm can undertake and is therefore likely to increase the firm's opportunity alertness and entrepreneurial mindset (p. 968)"

In short, there are researchers that implicitly and explicitly derive the thought from the Kirznerian role of entrepreneurship, primarily, nevertheless, in a perspective of reacting to changes (see e.g. Hitt et al., 2001; Ire-land & Webb, 2007), but also from the thought in alertness (see e.g. Ireland et al., 2003; Kyrgidou & Petridou, 2011) and the discovery characteristic (see e.g. Agarwal et al., 2010; Mathews, 2010; Kyrgidou & Petridou, 2011).

2.4.1.3 Knight version of entrepreneurship

The third key entrepreneurship scholar usually refers to Knight. According to Knight (1921), during real uncertainty, the role of the entrepreneur is to be a bearer and decision-maker. Real uncertainty should not be bewildered with risks and it cannot be calculated

(Knight, 1921). Moreover, in a company where uncertainty presents, the role to be a decision maker is critical and is being focussed on certain group in the top management, namely the entrepreneurs. With respect to strategic entrepreneurship, there are many papers study on the uncertainty and risks. Among others, Folta (2007) explicitly refers to Knight when publishing a commentary article in the Strategic Entrepreneurship Journal. Similar remarks also come from the moderator of the same journal (Schendel, 2007). Miller (2007) also derives the thought from Knight when talking about risk and rationality in entrepreneurial processes. For others, it is somewhat more implicitly (see e.g. Hitt et al., 2001, 2002; Ireland & Webb, 2003; Ireland et al., 2009). For instance Ireland and Webb (2007) emphasizing the following:

> "[...] although exploration contributes to strategic flexibility (a skill through which the firm is able to acquire and subsequently use information to appropriately respond to change), the outcomes of investments made in the firm's exploratory capabilities are uncertain. Because some stakeholders (e.g., suppliers) often are uncertainty avoiders, exploratory actions may lack appeal, due to their experimental nature and the lack of certainty that positive outcomes will accrue from them. [...] In exploration, firms seek to discover opportunities for which markets do not exist. The process inherently involves much uncertainty and risk regarding, for example, how markets will form and the nature of competitors' actions (p. 54)"

Uncertainty is a fundamental element and basis in Knight's (1921) definition of an entrepreneur, as compared to innovation in Schumpeter's. Knight (1921) assumes that one

who be given a profit is also putting up with the risk of losing, which implies that the entrepreneur is a resource owner. There are among others, like Schumpeter (1934:75) who have disapproved of Knight's notion of not differentiating an entrepreneur from a resource owner. Moreover, predictable change does not usually result in profit, and the receiving of profit is momentary, enduring only until the associate innovation or adaptation has been by and large imitated. Similar to Schumpeter, Knight believed in a "dynamic residual theory of profit", but Schumpeter stressed on innovation and development instead of uncertainty and erratic change to be its factors (cf. Schumpeter 1934:128-56, 172).

In short, there are quite a few researchers inside strategic entrepreneurship who regard risk and uncertainties as a result from changes. A number of researchers explicitly derive thought from Knight, whilst others rather more implicitly poise their study within the role of Knight (e.g. Hitt et al., 2001, 2002; Ireland & Webb, 2003; Folta, 2007; Schendel, 2007; Miller; 2007; Ireland et al., 2009).

2.4.1.4 Say version of entrepreneurship

The fourth important entrepreneurship scholar typically refers to Say who views the entrepreneur as a coordinator. The requirement for someone to coordinate, monitor and make decisions upon the coordination of knowledge and labour plus how it should be employed, are central to this idea. Say elucidates that lacking these attributes means no business activity, and it is the entrepreneur who bears these duties. Say defines an entrepreneur as in paper of Drucker, (1995):

"The entrepreneur shifts economic resources out of an area of lower and into an area of higher productivity and greater yield (p. 19)"

Say widens comprehension of the entrepreneurship by adding (in Stevenson and Sahlman, 1987):

"[...] the concept of bringing together the factors of production (p. 14)"

Say did not, similar to Knight, stress on uncertainty in his definition, or else there are some resemblances between them pertaining to the entrepreneur as a decision-maker (cf. Henrekson & Stenkula, 2007). On the other hand, so far there is no researchers in strategic entrepreneurship have poised their study within this role of entrepreneurship, either implicitly or explicitly.

With regard to entrepreneurship theory, as mentioned earlier, it is provided with numerous definitions mostly based on the above four founders. Further definitions of entrepreneurship highlighted the perception of exploration and exploitation of opportunities. For example according to Hitt et al., (2001) in strategic entrepreneurship, the definition of entrepreneurship is "identification and exploitation of previously unexploited opportunities". According to Brown, Davidsson and Wiklund, (2001) entrepreneurship is referred to being a management move which is distinguished from the administrative conduct, and associated with the enthusiasm for the exploration and exploitation of opportunity. Also, the definition of entrepreneurship is opportunities-

seeking process where presently owned resources are not handled under serious consideration, such that the effort to exploit the opportunity is not vital during the process (Stevenson & Jarillo, 1990). Further researches by Shane and Venkataraman, (2000) also suggest wealth creation is corroborated by exploring and exploiting lucrative opportunities via entrepreneurship.

With regards to study on exploration and exploitation of opportunities on the whole, it has been many years that it develops into two rather dissimilar opinions whether opportunities are discovered or created (see e.g. Alvarez & Barney, 2007). Discovery concept of opportunities begin with ideas on "equilibrium and imperfection in markets", which is referred to be classical approach (Chabaud & Ngijol, 2005), or the economic school of thought (Companys & McMullen, 2007). Creation, on the other hand, is derived from the belief in the so call empirical approach (Chabaud & Ngijol, 2005) or may alternatively refer to be the cultural cognitive school of thought (Companys & McMullen, 2007). Relatively, this creation concept of opportunities could be regarded as rather current addition onto the study.

However this combined actions in exploration and exploitation of opportunity is somehow shifting the entrepreneurship in the direction of strategic management view. The necessity in isolating entrepreneurship (and its affiliations) away from strategic management is pointed out within other dissimilar researches amongst different paths in entrepreneurship study that need to converge with strategic management. That is entrepreneurship research which is distinguished with least need to converge with strategic management, is

frequently stated within various papers. According to Gregoire, Noel, Dery and Bechard, (2006) basically entrepreneurship concept requires general consensus to below key points:

"The clear definition of the concept;

The theories that can clarify the study of entrepreneurship;

The field's purpose, its practical impact, and especially the contribution separated from the other management sciences, particularly, strategic management;

The methods and measures used for studying entrepreneurship;

Entrepreneurship's legitimacy among the management."

Although in overall, entrepreneurship studies have issues in concept, but particular areas of entrepreneurship have advance significantly. Among them refers to entrepreneurial orientation (EO) theory that becomes the focus for many studies. EO successfully garners extensive emphasis within both theoretical and empirical that renders it to be a pervasive theory imperative in entrepreneurship study (Covin, Green & Slevin, 2006).

Based on the proposal by Covin and Slevin, (1989) entrepreneurial orientation (EO) comprises of three key dimensions namely innovativeness, proactiveness, and risk-taking. EO not only central in entrepreneurial resolutions and practices, it is included in the company's guidelines and actions (e.g., Lumpkin & Dess, 1996; Wiklund & Shepherd, 2003). Rauch, Wiklund, Lumpkin and Frese, (2009) consider EO as the "entrepreneurial strategy-making processes" which have been installed for fulfilling company's objective, generating competitive advantage as well as upholding the vision.

Corporate Entrepreneurship (CE) is another important concept related to entrepreneurship. According to Zahra, (1993) CE is delineated as strategic and organizational regeneration with two critical elements of innovation and venturing. To show CE as a merger of behaviours, Lumpkin and Dess (1996) expanded the Covin and Slevin (1989) model of EO to five elements with two extra dimensions namely autonomy and competitive aggressiveness.

According to Phan, Wright, Ucbasaran and Tan, (2009) CE is considered as renewal actions which shore up an established corporation's capability in competition and risk-taking, as well as perhaps encompassing with the extra novel businesses onto the corporation. As CE has association with corporation's strategic renewal activities, it is very much connected with strategic entrepreneurship theory such that SE is occasionally taken as within CE (Morris, Kuratko & Covin, 2008; Kuratko & Audretsch, 2009). That is, according to Guth and Ginsberg, (1990); and Kuratko, (2007), corporate entrepreneurship (CE) is comprised of strategic entrepreneurship and corporate venturing in established corporations. In this context, Kuratko and Audresch, (2009) state that strategic entrepreneurship can be considered wide range of entrepreneurial events, that perhaps bring about novel businesses addition onto the established firm, which is the corporate venturing.

As this research is in the context of SMEs, Covin and Slevin (1989)'s suggested entrepreneurship definition, which combines the three dimensions namely innovativeness, proactiveness and risk-taking, is adopted to be the fundamental concept. The corporate or larger and established enterprise level CE is not included in this research yet. Perhaps in

suggestion for future research, the extra two dimensions of EO autonomy and competitive aggressiveness should be included.

2.4.2 Strategic Management View

Similar to entrepreneurship, in the past, the field of strategic management can track back to the seventeenth century with ideas of strategic adaptation. There were at the start a lot of investigational studies done by researchers and consulting companies, which gave rise to the progress of two key directions in strategic management, namely defining strategy and resource allocation (Herrmann, 2005).

For the former direction where researchers are engrossed with defining strategy, there are many vital studies related to this such as those of Chandler (1962), Andrews (1971), Anshoff (1965) and Rumelt (1974). In the modern industrial world, underpinned by managerial practice, Hitt et al. (2001) articulate that wealth creation is central in strategic management. Moreover, the key attention among researchers is to elucidate discrepancy in company performance. In this expedition, Herrmann (2005) emphasizes that strategic management has built up ideas and thoughts that study the environment, and watch the management so as to elaborate designs and methodological improvements that pursue and attempt to forecast renovation in management practice. Environmental alignment is one of the projected results of a successful strategy. That is, in order to properly align with its environment, a company need to work out an equal for its exclusive competitive advantage with the opportunities in external environment (Hitt et al., 2001).

For the later direction where researchers are engrossed with resource allocation, the Boston Consulting Group (BCG) brought in the Growth/Share Matrix in the 1970s, an analytical instrument for portfolio mapping (Herrmann, 2005). As of this study, according to Herrmann, (2005) the allocation of resources are central in managerial consideration in reality. Later in middle of 1980s, it is proposed that the perspective of resources could convey another penetration to companies than the conventional product perspective for instance, by spotting resources that bring about impressive profit and /or growth (Wernerfelt, 1984). To many, Wernerfelt is regarded as the founder of the Resource-Based View (RBV). In short, RBV is an interpretation in strategic management that has surfaced from two tactics, namely resources and performance (with converge on differentiations in performance). Within RBV, a strategy for bigger companies indicates equilibrium between the exploitation of current resources and the acquirement/ development of novel ones.

Strategic entrepreneurship researchers have a propensity, explicitly or implicitly, for deriving thoughts from characteristics of the RBV. As such, most researchers choose to centre on resources as the unit of analysis (see e.g. Hitt et al. 2001; Hitt et al., 2002; Ireland & Webb, 2003; Ireland & Webb, 2007; Monsen & Boss, 2009; Audretsch et al., 2009; Kyrgidou & Hughes, 2010; Agarwal et al., 2010; Mathews, 2010; Kyrgidou & Petridou, 2011). Majority of them, nevertheless, look at the wider aspect of resources, which can track back to Barney (1991), who regarded resources as:

> "[...] all assets, capabilities, organizational processes, firm attributes, information, knowledge etc. controlled by a firm (p. 101)"

It is probable to declare that this perception of resources is so prevailing in strategic entrepreneurship that it is hardly a paper that does not associate to resources in certain way. It is therefore, important to have enhanced discussion of RBV, and how strategic entrepreneurship researchers are able to derive thoughts from this perspective.

Thus it might be desirable bringing up the discussion that there is an emergent field within strategic management, namely dynamic capabilities (cf. Teece, Pisano & Shuen, 1997; Eisenhardt & Martin, 2000). The literature on dynamic capabilities is regarded by many as a good supplement to or an augmentation of the RBV (Eisenhardt & Martin, 2000; Ambrosini & Bowman, 2009; Lockett, Thompson & Morgenstern, 2009). Nevertheless, the RBV has not sufficiently given details on how and why particular companies have a competitive advantage in circumstances of fast and erratic change (Eisenhardt & Martin, 2000). And in this context, dynamic capability is alleged to be able to do so. That is, it would be probable to declare that dynamic capabilities could be a constructive idea among strategic entrepreneurship researchers. Thus there are also few strategic entrepreneurship researchers who adopt this stance. For instance, Kyrgidou and Hughes (2010) adopt an idea of dynamic capabilities as method to promote development of a model of strategic entrepreneurship. Another example relates to dynamic capabilities as a means to manage resources to match with the external market (Luke, Kearins & Verreynne, 2011). There are also researchers who do not evidently pose themselves with the concept of strategic entrepreneurship, but talk about entrepreneurship and features of strategy. For instance, Zahra, Sapienza & Davidsson,, (2006) emphasize that dynamic

capabilities are a critical and complicated idea that are central in the entrepreneurship and competitive strategy literatures.

Strategic management is thus refer to as a process that depicts a way of dealing with the organizational undertaking, chooses how company run, and with aim of sustaining company growth (Schendel & Hofer, 1979). Strategic management is reckoned to be a perspective in which entrepreneurial activities are conducted for discovering as well as exploiting opportunities (Ireland, Hitt, Camp & Sexton, 2001). Other scholars believe that strategic management focuses on the duties that ought to be carried out to achieve competitive advantage and enhance company's performance (Schindehutte & Morris, 2009). Strategic management is a theory which consists of strategic thinking and strategic planning. Strategic thinking provides perspective from outside and focuses on seeking the leads to competitive advantage, whereas the later strategic planning is the main phase in mapping prospect business path (Kuratko & Audretsch, 2009).

Cooper, Markman and Niss, (2000) feel that while entrepreneurship talks about novel creation of new undertaking, in contrast strategic management probes the dynamics that affect company performance as well as striving for leads to sustainable competitive advantage (SCA). According to Ireland, Hitt and Sirmon, (2003) unlike entrepreneurship where entrepreneur is accountable to the external opportunity, strategy management has already been referred to be the mechanism of generating or producing opportunities.

2.4.3 The concept of Strategic Entrepreneurship

The comprehension of "strategic entrepreneurship" (SE) has not reached a consensus yet. Different scholars have different viewpoints: in entrepreneurship as well as organizational view (Ireland, Covin & Kuratko, 2009), in economic police stand-point (Fernhaber & McDougall-Covin, 2009), in complexity concept (Schindehutte & Morris, 2009) and in strategic perspectives (Shepherd, Wiklund, 2009). From the paper "Guest Editors: Introduction to the Special Issue Strategic Entrepreneurship: Entrepreneurial Strategies for Wealth Creation", the phrase "strategic entrepreneurship" is initially coined by Hitt et al., (2001). According to Covin and Miles, (1999) the ideas pertinent to entrepreneurship and strategic management are vital in the initial phase of research on the combination of the two concepts. Consequently, according to Ireland et al., (2001); and Hitt et al., (2001), (2002) strategic entrepreneurship researches in initial stage are looking into the innovation, organizational learning, internationalization, growth, top management teams (TMT) plus governance, networks as well as alliances.

It is pointed out in previous section that a few scholars refer strategic entrepreneurship to be part of corporate entrepreneurship theory (Guth & Ginsberg, 1990; Kuratko, 2007; Covin & Kuratko, 2008). According to Kuratko and Audretsch, (2009) it is connected with the entrepreneurial actions of the companies, which comprise of among many others, mergers and acquisitions on top of the fresh undertaking in businesses. Lumpkin and Dess, (1996)'s study on management procedures that create entrepreneurial actions, and recognize those factors influencing these actions. Both of them bring in entrepreneurial orientation theory that represent the interface at the entrepreneurship and strategy, plus

signify main factor related to entrepreneurial actions as well as company performance (Luke & Verreynne, 2006).

To conceptualize strategic entrepreneurship, there are many works done. One of the crucial studies is by Ireland, Hitt and Sirmon, (2003) who propose SE to be the identification and exploitation of opportunities whilst creates and sustains competitive-advantage. Based on Ireland et al., (2003) SE modelling, there are four key dimensions; namely "entrepreneurial mindset, entrepreneurial culture and entrepreneurial leadership, strategic management of resources and applying creativity and developing innovations", as shown in below Figure 2.6.

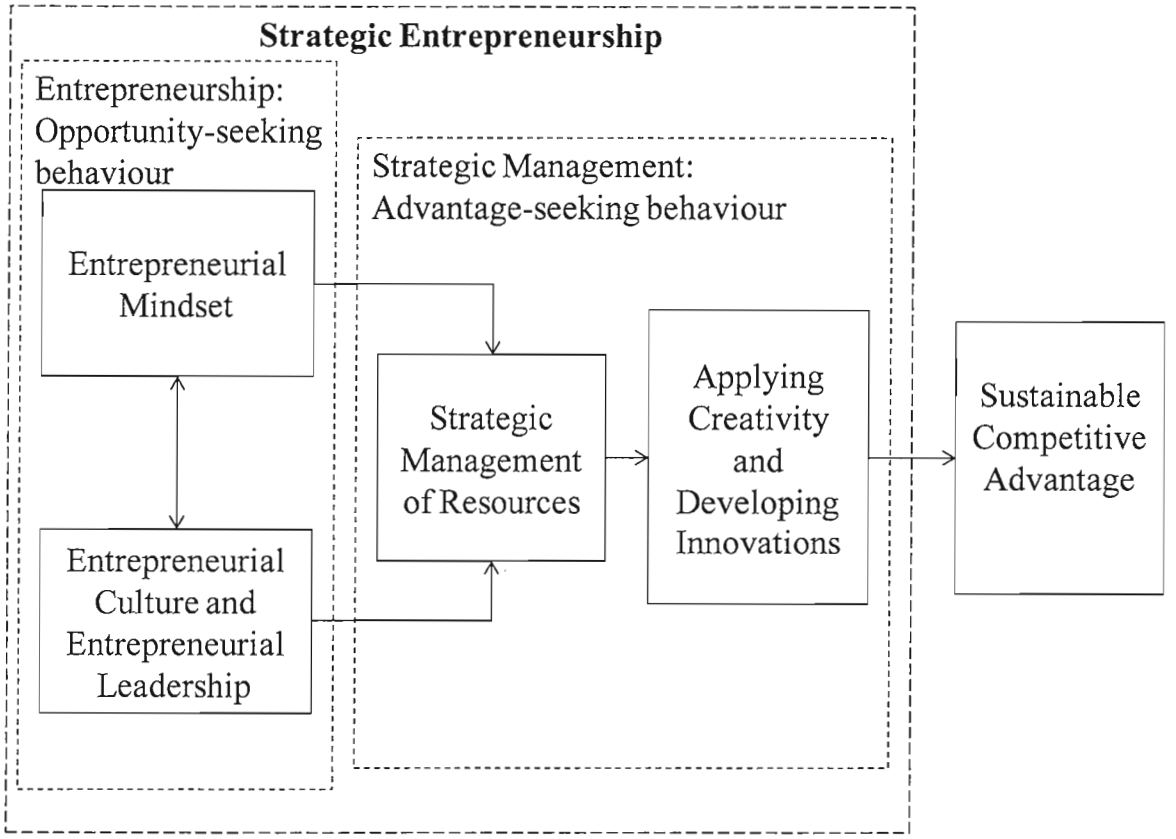

Figure 2.6
Ireland et al., (2003) theoretical framework of strategic entrepreneurship

Source: Ireland, Hitt, Sirmon (2003).

According to Ireland, et al., (2003) entrepreneurship together with strategic management link to growth as well as wealth creation. Ireland, et al., (2003) indicate that entrepreneurship is becoming a catalyst for wealth creation to various types of economies due to the actions taken by the companies, whilst strategic management attempts to explain the disparities of wealth creation in the companies of emerging, developing, and developed economies. They, therefore, regard strategic entrepreneurship SE as a special tool which can assist firms to create wealth via developing sustainable competitive advantage (SCA).

According to Day and Wendler, (1998) Ireland et al., (2003) further argue that since a lot of firms not succeed in inspiring people in pursuing entrepreneurial-opportunities, the behaviours of opportunity-seeking together with advantage-seeking become compulsory in wealth creation. Owing to not managing the resources strategically, entrepreneurs might be discovering as well as exploiting opportunities which generate short-term instead of sustainable competitive advantages (Hitt et al., 2001). On the basis of the company's resource based view (RBV), according to Ireland et al., (2003) strategic entrepreneurship SE help to recognize of the resources necessary to exploit growth opportunities to facilitate creation and sustaining competitive advantage.

Together strategic management and entrepreneurship are considered to be complementary to each other. Meyer and Heppard, (2000) propose both entrepreneurship as well as strategic management fields should be integrated due to the results of their study that have to be analysed together for better comprehension. Some researchers discovered competitive advantage theories are very near to creativity and entrepreneurship theories (Barney & Arikan, 2001). According to Kuratko and Audretsch, (2009) strategic management is to establish and exploit competitive advantages under certain situation, whilst entrepreneurship explores competitive advantages via numerous innovative activities in process, product and market. Companies engage in strategic entrepreneurship by opportunity-seeking behaviour and advantage-seeking behaviour. The former is through the searching for essentially novel opportunities and the latter via changing the status quo of the industry competitive standings or creating a novel market arena (Ireland et al., 2003).

Strategic entrepreneurship comes in five types: domain redefinition, business model reconstruction, strategic renewal, organizational rejuvenation, sustained regeneration (Covin & Miles, 1999). Domain redefinition allows company in creating fresh or novel product-market space that yet to be discovered by competitors, similar to 'blue ocean' concept. Business model reconstruction is regarded as situation where company alters the key business model for fulfilling better competence in operation or obtain differentiation against industry competitors with different approach that is value-added to the market. Strategic renewal refers to company changing its relation to the markets as well as competitors via considerable modification of its tactics to compete. Organizational rejuvenation means to improve or sustain competitive standing via innovation on interior performance: altering interior structures, processes as well as abilities. Sustained regeneration refers to 'sustaining' the 'product-innovation' actions: introduce novel products plus services, venture into novel markets (Covin & Miles, 1999).

Overall, the concepts and theories described within above literature are combined and illustrated in Figure 2.7 below.

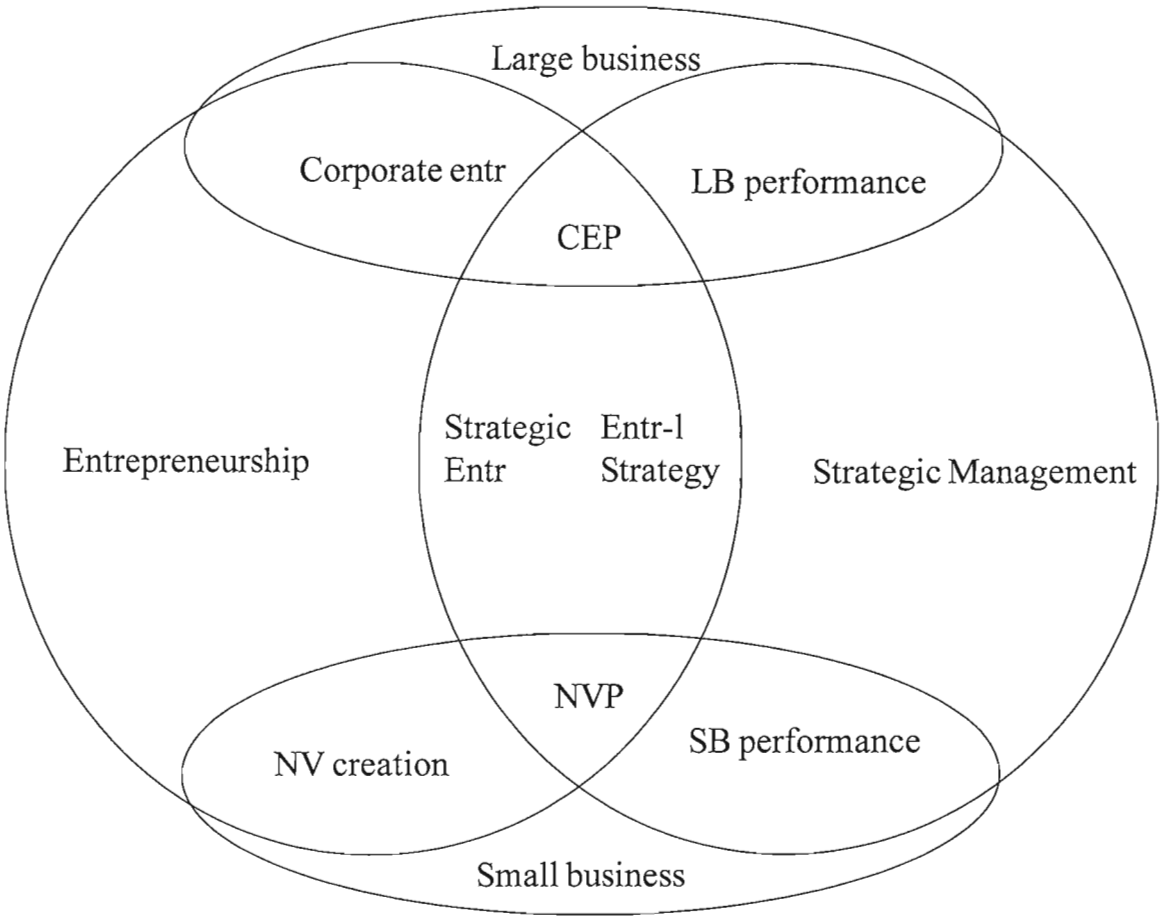

Figure 2.7
Combination of theoretical concepts

Source: Meyer (2009)

Note: "CEP - corporate entrepreneurship performance; NVP - new venture performance"

2.4.4 Exploration and exploitation

Subsequent study within strategic entrepreneurship discipline focus onto the concept's antagonistic aspect: exploration together with exploitation actions need to be balanced. According to Barney, (1991) sustaining competitive advantages refer as "valuable, rare, inimitable and non-substitutable" by competitors. Effective SE facilitates company's capability in developing relatively sustaining in competitive advantages (Ireland et al.,

2007). Companies which have their exploration and exploitation activities balanced attain sustaining innovation consequently and hence sustainable competitive advantage (Ireland et al., 2007).

According to March, (1991) for many companies, there are various reasons which make exploitation the prefer one as compared to exploration. These reasons include, exploitation is through following favourable and familiar organizational routines; the risk aversion behaviour in various parties such as workers and suppliers. Also, explorative actions are usually experimental in nature and full of uncertainty. Thus this adversely influences the companies' aspiration for exploration activities which need practising unfamiliar and brand new procedures.

Company could balance the exploration and exploitation activities which are antagonistic in nature via transformation of business model. However, the route to migrate between exploration and exploitation seems not easy which needs separate alterations in operation, structure as well as culture (Ireland et al., 2007).

According to previous literature, entrepreneurship is related to actions taken to generate novelty or newness (Ireland, Hitt & Sirmon, 2003). According to Sharma & Chrisman, (1999) newness is in establishing new organizations, creating new organizational units or rejuvenating current company's structure. Ghemawat, 2002 points out that strategy management, on the other hand, is related to the company's development in the long run. According to Hofer and Schendel, (1978) there are a few factors in a company's long

term development, for instance determinations of capacity, the acquiring and management of resources, as well as the proposed leads to competitive advantage.

To engage in SE, company integrates both exploration-oriented and exploitation-oriented elements in developing steady flows of innovative activities as well as sustaining technological lead in competition. Through combine innovations not only in product, but also in process and administration, sustainable competitive advantage (SCA) is attainable (Ireland & Webb, 2007).

Both exploration and exploitation have dissimilarity in cultural as well as structural aspect of the organization. Organizational structure for exploration requires decentralization in decision making, loosely-standardized practices as well as loosely-formalized routines. Organizational culture for exploration advocates experimenting practices, accepting uncertainties as well as tolerating failures. Organizational structure for exploitation, in contrast, has full backing by powerful centralized board, fully standardized as well as highly-formalized procedures. With respect to organizational culture, exploitation demands stronger assurance in undertaking and results, focusing onto current competencies as well as the desirable short-term targets (Ireland & Webb, 2007).

To facilitate the balance between exploration and exploitation, several steps are suggested. These includes understanding of balance and underlying reasons, examining internal and external situation and bringing in interfacing manager position to balance the plan with the actual (Ireland & Webb, 2007).

Subsequent study by Ireland and Webb (2009) extend the concept with the introduction of a few instruments to migrate seamlessly between exploration and exploitation. The proposed instruments are to set what to expect, develop contingent planning as well as justify any alteration.

2.4.5 Conceptualization to Strategic Entrepreneurship modeling

Scholars Schindehutte and Morris (2009) advance the study on SE developed through the lens of complexity theory and advocate different view on this topic.

Ireland, Hitt, Camp and Sexton, (2001) conceptualize strategic entrepreneurship (SE) by stressing on the combination of strategic as well as entrepreneurial activities simultaneously in creating wealth. However, the two scholars above, Schindehutte and Morris, highlight the lack of conceptual clarity for SE to be one model, paradigm, framework or some other thing (Schindehutte & Morris, 2009). Schidehutte and Morris, (2009) also argue that SE, by having strategy combines with entrepreneurship, is no way representing either a novel strategy theory or entrepreneurship theory. Hitt et al., (2001) are suggesting studying the paradigm aspect of entrepreneurship. However so far it is yet to be materialized (Schindehutte & Morris, 2009).

There are five sections as pointed out by Schindehutte and Morris (2009) need to be develop further. There is a requirement to study whether a firm can simultaneously pursue both exploration and exploitation as both are antagonistic in nature. Besides, entrepreneurship as well as entrepreneurial opportunity has ambiguity in characteristic. Subsequent two crucial sections to study have relation with new or innovative activities

and its outcome, being creating change as well as transformation, resulting towards even newer and more innovative activities. Lastly, there is requirement to pay attention to the dynamics view on strategic entrepreneurship.

Schindehutte and Morris (2009) recommend SE imperatively to have a novel paradigm which :

i. deliberates the interactions among large number of relationships within exploration-exploitation structure,

ii. tackles entrepreneurship, innovation, and newness very differently instead of addressing all to be the same or one construct only,

iii. unties the dissimilar innovative activities' loci,

iv. builds up an appropriate organization with architectural formation to facilitate the accommodation of the dissimilar spatial dimensions' performances, plus

v. gives a valid ontology base to have modification in theory.

As oppose to the emphasis of entrepreneurship as well as strategic management, which have unit of analysis as individual and firm respectively, these two scholars recommend that the opportunity space should be the unit of analysis. To be a paradigm, strategic entrepreneurship must have the ability to tackle circular-causality where effect turn out to be a cause, multi-causality, meta-stable incoherencies, non-linear links, feed-back loops,

time dependent procedures, as well as self reinforcing systems. Consequently it could then (Schindehutte & Morris, 2009, p. 265):

"address the what (fluctuations and transformations), why (complexity), how (self-organization and emergence), who (different perspectives, e.g., entrepreneur, firms, institutions, or peripheral), and where (the opportunity space) of stability and change".

The main objective within strategic entrepreneurship is to simplify the comprehension of the relationships inside opportunity space, how the relationships transform and develop in connection with procedures, events, as well as structures on every stage, plus how the procedures connect at various stages (Schindehutte & Morris, 2009).

Schindehutte and Morris, (2009) state that the distinction of strategic entrepreneurship in entrepreneurship, strategic management, evolutionary economics or corporate entrepreneurship as well as their associated concepts is highlighted and stressed in this recommended shift in paradigm. To them, strategic entrepreneurship is presumed to manage the complex dynamics' creative latent, systemically, which will create, develop, and enhance value all over this system.

Apart from Schindehutte and Morris, (2009) this model of strategic entrepreneurship by Ireland et al. (2003) has been queried by other scholars as well. First, within the model, there is obscurity pertaining to how companies might use strategic entrepreneurship in practice, as pointed out by Luke et al. (2011). Likewise, Kyrgidou and Hughes (2010) also dispute that the model has to put up with constraints that trade off the comprehension of how strategic entrepreneurship may be employed to perform efficiently in practice.

Second, Luke et al. (2011), dispute that there is inadequacy in the direction on how strategic entrepreneurship essentially might be attained. Third, according to Kyrgidou et al., (2010), the Ireland et al., (2003) model of SE does not match to what was defined as simultaneous pursuing of opportunity seeking as well as advantage seeking behaviour, instead somewhat implies sequential or linear viewing for the isolated entrepreneurial as well as strategic behaviours with no feed-back loop. As such, these two scholars propose the model to include a feed-back loop which is the "learning dynamic capability renewal", as well as "internal environment and top management vision" to be the crucial context in SE. The existing model can be shown in the following Figure 2.8.

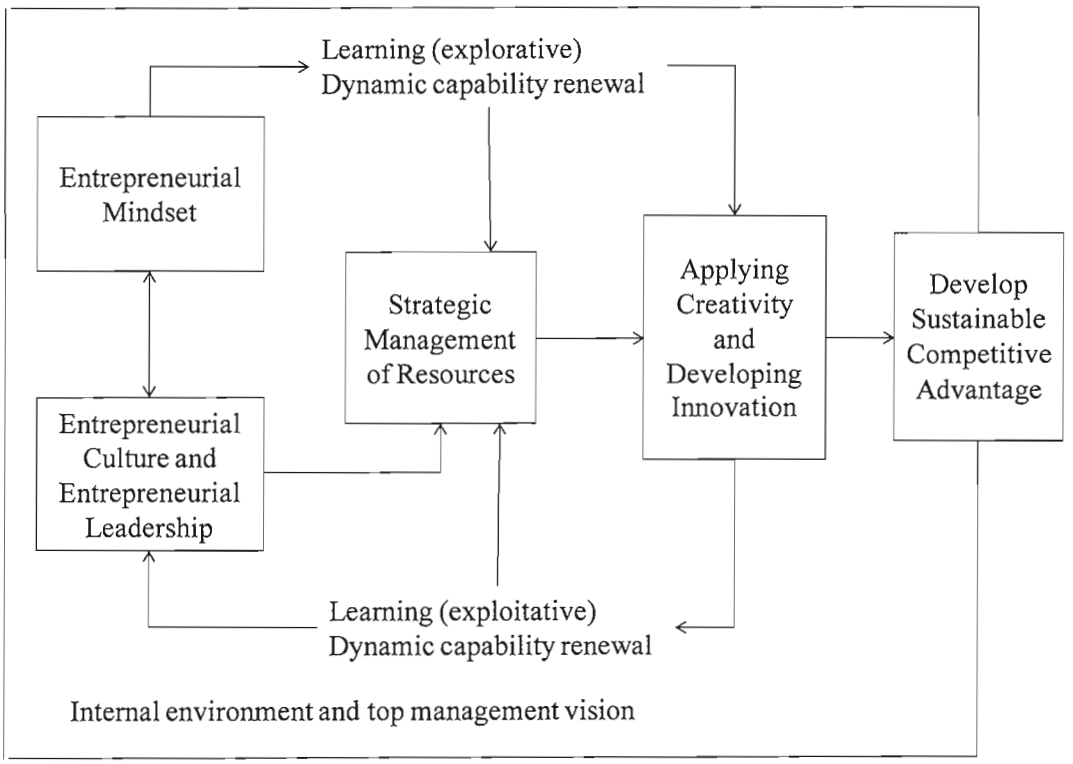

Figure 2.8
Another model of Strategic entrepreneurship

Source: based on Ireland, Hitt, Sirmon (2003) and Kyrgidou, Hughes (2010).

In this proposed model, companies have to reiterate between events of opportunity-seeking, strategic management of resources - via bundling, re-bundling, obtaining and divestment of resources - and opportunity exploitation via inventing and setting up innovation. That is, the major structure of elements in Ireland et al. (2003) is still kept. Moreover, their model also counts on the eight underlying components of SE namely, identifying opportunity, innovativeness, growth, risk-acceptance, vision, flexibility, dynamic capability as well as resource management. It is vital to be aware that each of the first six components (before dynamic capability) is established alongside to the shared value of dynamic capability and resource management creation. Again, it can be observed that the dynamic capability method is the genuinely novel component in this new proposed model of strategic entrepreneurship. Nevertheless, still there are limitations in this new model. That is, their model relies on the deployment of activities of specialists but does not explain the internal circumstances in the company that give the framework, that comes with certain context and structure, where these performance happen (Kyrgidou & Hughes, 2010).

2.5 The discussion of past articles on strategic entrepreneurship

The researcher attempts to complement the literature review by more detail analysis of twenty published articles/papers where researchers position their researches evidently to be SE study. These papers represent the scientific discussion on SE where each of them is designated with a number (No.1 to No.20) for easy referencing. The summary of the findings of these papers is shown in Table 2.9.

Table 2.9
Past studies in strategic entrepreneurship

No.	Title/ assumption	Authors/ country of study/ year	Level of analysis	Research methodology	View on SE	Reasons/results
1.	Guest editors' introduction to the special issue strategic entrepreneur-ship: entrepreneurial strategies for wealth creation. / Positivistic.	Hitt, M.A., Ireland, R. D., Camp, M. & Sexton, D.L. / No specific country/ 2001	Firm	Conceptual, from previous literature.	Opportunity & advantage-seeking behaviour.	"To encourage, nurture & publish research which combine both entrepreneurship and strategic management views."
2.	A model of strategic entrepreneurship: the construct and its dimensions. / Positivistic.	Hitt, M.A., Ireland, R. D. & Sirmon, D.G. / No specific country/ 2003	Individual & firm	Conceptual, from previous literature.	Opportunity & advantage-seeking behaviour.	"Development of SE model which describes how entrepreneurship and strategy aspects are combined in wealth creation."
3.	Strategic Entrepreneurship and Managerial Activities in SMEs / Positivistic.	Messeghem / No specific country/ 2003	Firm - SMEs	Survey (quantitative)	SE as entrepreneurial orientation	"Entrepreneurial orientation is related to complex organizational structure."
4.	Strategic Entrepreneurship in a Globalising Economy: Evidence from Emerging Economies / Positivistic.	Ramachandran, Mukherji, Sud / India / 2006	Firm - Pharmaceutic al company	Multiple case studies	SE as combination of risk seeking entrepreneurial behaviour with advantage sustaining strategic behaviour	"Less failures and better results for company balancing opportunity-seeking and strategic behaviour Tendency to involve both in the long term."
5.	Exploring strategic entrepreneurship in the public sector / Positivistics.	Luke, Verreynne / No specific country/ 2006	State-owned enterprise	Multiple case studies (qualitative)	SE as combination of opportunity identification, vision, innovation, growth, acceptance of risk and flexibility	"Identification of core and supportive elements of SE."
6.	Strategic entrepreneur-ship, collaborative innovation, and wealth creation. / Positivistic.	Ketchen, D., Ireland, R.D. & Snow, C. / Examples from USA. / 2007	Firm	Conceptual, from previous literature.	Opportunity & advantage-seeking behaviour.	"Collaborative innovation for small and large firms to overcome their challenges by learning how to integrate SE and collaborative innovation to create wealth."
7.	Strategic entrepreneur-ship: creating competitive advantage through streams of innovation. / Positivistic.	Ireland, R. D. & Webb, J.W. / Examples from USA. / 2007	Individual & firm.	Conceptual, from previous literature.	Opportunity & advantage-seeking behaviour.	"SE as the means through which firms simultaneously exploit their current competitive advantages while exploring for future opportunities."

8.	Strategic entrepreneur-ship: exploring different perspectives of an emerging concept. / Positivistic.	Kuratko, D.F. & Audretsch, D.B. / No specific country/ 2009	Individual & firm.	Conceptual, from previous literature.	Opportunity & advantage-seeking behaviour.	"An introduction to a special issue that examine different perspectives that relate to strategic entrepreneurship."
9.	Crossing the great divide of strategic entrepreneurship: transitioning between exploration and exploitation.	Ireland, R. D. & Webb, J.W. / No specific country / 2009	Individual & firm.	Conceptual, from previous literature.	Opportunity & advantage-seeking behaviour.	"SE is proposed as a means via which decision makers can manage uncertainty, which is stated to be a crucial capability."
10.	Strategic Entrepreneurship at Universities: Academic Entrepreneurs: Assessment of Policy / Positivistic	Patzelt, Shepherd / No specific country / 2009	Firm - Academic venture	Survey (quantitative)	SE as setting and achieving strategic developmental goals by entrepreneurial ventures	"Access to financial resources is the primary measure of policy programs; it enhances perceived benefits from access to nonfinancial resources and reduction of administrative burdens but substitutes tax incentives."
11.	Agency and governance in strategic entrepreneurship. / Positivistic.	Audretsch, Lehmann, Plummer / Germany / 2009	Individual & firm - German IPO firm	Survey with published documents of 127 CEOs of new ventures. (Hypothesis testing (chi^2)).	SE to be balanced in opportunity-seeking and advantage-seeking behaviour. Strategically development of novel resources via entrepreneurial process.	"Illustration of agency theory relevance to SE. / Patent ownership of the top manager significantly increases the percentage of equity held; number of patents held by the firm significantly decreases the percentage of ownership."
12.	Agency, strategic entrepreneurship, and the performance of private equity-backed buyouts. / Positivistic.	Meuleman, Amess, Wright, Scholes / Great Britain / 2009	Firm - Private equity backed buyouts	Survey with 238 buyouts studied via 3 databases. (Hypothesis testing (chi^2)).	SE to recognize resources required to exploit growth opportunities to create SCA.	"Develop the complement aspect of agency theory with strategic entrepreneurship views. / Divisional buyouts are associated with increases in efficiency; higher levels of PE firm experience are associated with higher levels of growth; PE firm experience and intensity of follow-up is

						mainly important in achieving growth."
13.	The impact of strategic entrepreneurship inside the organization: examining job stress and employee retention. / Positivistic.	Monsen, Boss / USA/ 2009	Individual - managers and staff in hospital units	Survey with 1,975 managers & staff in 110 departments. (Hypothesis testing).	SE as a balance of opportunity-seeking and advantage-seeking behaviour via integration of entrepreneurship and strategic management respectively, model of Ireland, Hitt, Sirmon (2003).	"Reveal organization black-box via research on firm members' reactions to entrepreneurial strategies. / EO: Risk taking, innovativeness & proactiveness impact negatively to resources: the role ambiguity & intention to quit. Higher impact for managers than member staffs."
14.	Advancing strategic entrepreneurship research: the role of complexity science in shifting the paradigm. / Complexity	Schindehutte, M. & Morris, M.H. / No specific country / 2009	Multiple	Conceptual, from previous literature.	SE is not a binary construct and one interrelated system.	"Five areas are identified whereas more development might enhance the current model of SE."
15.	Lachmannian insights into strategic entrepreneur-ship: resources, activities and routines in a disequi-librium world. / Positivistic.	Mathews, J.A./ No specific country / 2010	Individual & firm	Conceptual, from previous literature.	An entrepreneur who acts on opportunities in pursuit of profit.	"Offering a framework to discuss the SE dynamics of the company in a thoroughly Lachmannian spirit."
16.	Knowledge spillovers and strategic entrepreneur-ship. / Positivistic.	Agarwal, R., Audretsch, D. & Sarkar, M.B. / Examples from USA / 2010	Multiple	Conceptual, from previous literature.	Opportunity & advantage-seeking behaviour.	"Knowledge spillovers and SE are significantly being considered separately instead of in conjunction with each other."
17.	Strategic entrepreneur-ship: origins, core elements and research directions. / Positivistic.	Kyrgidou, L.P. & Hughes, M. / No specific country / 2010	Firm	Conceptual, from previous literature.	Opportunity & advantage-seeking behaviour.	"Little consensus exists over the meaning of the concept of SE, its constituents and its operation."
18.	Developing a conceptual framework of strategic entrepreneurship. / Positivistic.	Luke, B., Kearins, K. & Verreynne, M-L. / New Zealand / 2011	Firm	Case study. Documents, observation, and interviews with executives (qualitative)	Opportunity & advantage-seeking behaviour.	"To develop a conceptual framework of strategic entrepreneurship from theory and practice."

19.	The effect of competence exploration and competence exploitation on strategic entrepreneur-ship. / Positivistic.	Kyrgidou, L.P. & Petridou, E. / Greece / 2012	Firm	Survey with 144 CEO in medium-to-large-sized firms. (Hypotheses testing.)	Opportunity & advantage-seeking behaviour.	"Resources, exploration, exploitation, capabilities. Important gaps exist in the understanding of the ways in which firms can achieve SE."
20.	Performance of Russian SMEs: exploration, exploitation and strategic entrepreneurship. / Positivistic	Shirokova, G., Vega, G., & Sokolova, L./ Russia/ 2013	Firm	Survey with 500 Russian SMEs. (Hypothesis testing).	Exploration (EO & EV) & exploitation (Investments in internal resources; Knowledge management; Organisational learning; Developmental changes & Transitional changes).	"The Russian firms show a positive influence of certain constructs within exploration and exploitation on firm performance."

Sources: Adaptation from Sokolova, (2011); Höglund, (2013).

2.5.1 Assumption on ontology and epistemology

Within SE, there exists propensity for excluding discussion pertaining to other kind of world-viewing (ontology), and knowledge-creation (epistemology) from the assumptions as positivist. All the papers have assumptions as positivist except one paper No.14 from Schindehutte and Morris (2009) who attempt to challenge this dominant assumption with the introduction of complexity theory. The state in complexity approach depends onto a context at the interface of modernism (positivist) and post-modernism. Assumptions on objective-ontology form the base in positivist as well as post-positivist views which are dominance in entrepreneurship study (Sarason, Dillard & Dean, 2010; Alvarez & Barney, 2007), and also SE research (Schindehutte & Morris, 2009). This evidence is very clear during researchers' discussion on exploration and exploitation of opportunity, their same approach is by treating opportunities as objects which float around the market pending the entrepreneur to discover via alertness and correct information (Barney & Alvarez, 2007;

Chabaud & Ngijol, 2005). When researchers view these assumptions regarding opportunity, they also position their study in the classical economic school-of-thought, which in essence a positivist, on the basis of realist-assumptions, as well as dissimilar parts in equilibrium-theories (Barney & Alvarez, 2007; Chabaud & Ngijol, 2005). As such, from all the papers in analysis, excluding No.14, view dissimilar aspects of opportunity for attempting to elucidate SE. As a result, there are fourteen articles (Nos 1-2, 5-9, 11, 13, 15-19) describe SE as firm's opportunity seeking as well as advantage seeking behaviour or individual level of analysis.

However, some of the studies are having positioning in the cultural cognitive school-of-thought and opportunity-creation (Venkataraman & Sarasvathy, 2001). Opportunity-creation could be taken to be social-construction created from "perceptions and belief of many individuals" (Alvarez & Barney, 2007). In other words, it is possible to view opportunity to be social-construction, a view yet to be adopted by any SE researcher.

2.5.2 A survey of past strategic entrepreneurship empirical studies

The concept of SE can be considered relatively recent with respect to the not so many studies are empirical. According to Luke and Verreynne, (2006) majority of the studies are on conceptualization as well as theoretical contributions toward SE as compared to the much fewer empirical studies on SE. Ten out of the twenty researches in the analysis are conceptual based on previous literature to contribute further in SE concept.

Within this section, the review of the key empirical researches on SE are emphasizing on those factors, via the identification by the authors, of which SE is constituted. Some

studies relate to corporate entrepreneurship were in the list also since they are in close connection with SE as well as having significant influence to other SE empirical researches. The analysis, in chronological order, to compare different researches in conceptual and empirical, is shown in Table 2.9.

Within the (No.3) empirical study "Strategic Entrepreneurship and Managerial Activities in SMEs" Messeghem (2003) is researching on EO and SMEs organization-structure within food industries.

According to Messeghem, (2003) this quantitative research indicated companies equipped with high EO are in tandem with strong bureaucratic organization-structure, which is contradicting with Mintzberg's study (1973) that relates high EO with simple organization- structure. In this Messeghem, (2003) SE research, EO is comprised of: "innovativeness, proactiveness and risk-taking" whereas organization-structure features is comprised of: "standardization, formalization, specialization, the planning and control system and the information system".

Within the (No.4) empirical study "Strategic Entrepreneurship in a Globalising Economy: Evidence from Emerging Economies", Ramachandran, Mukherji and Sud (2006) carried out multiple case-studies in two pharmaceutical firms in India via the internalization procedure.

Ramachandran, Mukherji and Sud, (2006) able to identify the influences of SE on firms' successes, among others is the aggressiveness and excessive risk-seeking, whilst the other

was the balancing act of risk-seeking behaviour by systematically planning as well as structurally changes.

The findings reveal owing to risk seeking behaviour, first firm encountered larger number of failures than the second, which in addition experienced bigger success. Ramachandran, Mukherji and Sud, (2006) thereby make a conclusion that integration of entrepreneurship and strategic management results in a much better position than a predominantly entrepreneurial behaviour. They stated that even-though firms require entrepreneurial behaviour at the beginning of the internalization procedure, there is still inadequacy for achieving sustaining competitive advantage (SCA). Ramachandran, Mukherji and Sud, (2006) found that SCA could be achieved via implementation of the correct organization structure, required processes/policies, planning/conducting activities as well as balancing/removing various risks which concern with internationalization procedure. They consider the entrepreneurial behaviour defined in McDougall and Oviatt (2000) suggestion to combine innovativeness, proactiveness as well as risk seeking behaviour. Definition of SE in this case is to implement both these entrepreneurial behaviour and strategic activities which include adapting organization structure and culture as well as risk-mitigating attempts (Ramachandran, Mukherji & Sud, 2006).

Researchers within SE are mostly avoiding qualitative analysis. In fact, out of the nineteen papers there are only two researches: one by Luke and Verreynne (2006)(No.5), and one by Luke et al., (2011)(No.18).

Within the (No.5) empirical study "Exploring strategic entrepreneurship in the public sector" Luke and Verreynne (2006) have focused onto the entrepreneurial actions plus strategic latent inside state owned enterprises.

The findings from this qualitative research revealed that entrepreneurial actions within each case-study involved strategic approach. The researchers have recognized five key-dimensions in the construct as well as six supporting-dimensions. Key-dimensions within each case-study comprised of: "vision, flexibility, risk-acceptance, development of innovation and growth". Six supporting-dimensions comprised of: "transfer and application of knowledge, cost efficiency, operational excellence in core capabilities, branding as a form of differentiation, organizational culture with confidence in organization's capabilities and concern for people as well as strategic processes related to vision" (Luke, Verreynne, 2006). Meanwhile, the study did not corroborate the significance in other dimensions recognized to be main factors of SE theoretical researches: "top management teams and governance" (Ireland et al., 2001) as well as "internationalization" (Hitt et al., 2001).

Within the (No.10) empirical study "Strategic Entrepreneurship at Universities: Academic Entrepreneurs: Assessment of Policy" Patzelt and Shepherd (2009) research on perception of entrepreneurs on the value of policy programmes for the current academic ventures' strategic developments, which focus onto means in accessing crucial resources, as well as adjustment of the regulatory plus legal conditions as per required by entrepreneurial-ventures (Lundström & Stevenson, 2005).

According to Patzelt and Shepherd, (2009) the findings of this quantitative research reveal accessing-to-finance is the most significant measure of entrepreneurial policy programmes and it shores up the entrepreneurial perception of the benefits in other policy approaches for example: "reduction of administration burdens and accessibility in non-financial resources (business knowledge, networks)", but reduces perception of the advantages in tax incentives.

Within the (No.11) empirical research "Agency and Governance in Strategic Entrepreneurship" Audretsch, Lehmann and Plummer, (2009) view SE via agency-theory, with the study of new venture's control of key resources and its relation to the equity distribution among principal as well as agent.

According to Ireland, et al., (2003) one key component in their SE model is to strategically manage the organization resources. The research question of this empirical research focus on "how a company can control resources (its human capital: managers) it does not own". The findings show consistency to the hypothesis: top manager's equity share decreases with the number of company's patents and increases with the patents under his possession. As function of top-manager increases within SE perspective, the agency factor has significant influence to company performance. Also this is hinged on the requirement of combined entrepreneurial mindset and culture to be key components in SE model whilst the conflict-of-interests could jeopardize SE within (Audretsch, Lehmann & Plummer, 2009).

Within the (No.12) empirical research "Agency, Strategic Entrepreneurship, and the Performance of Private Equity-Backed Buyouts", together with the past study, Meuleman Amess, Wright and Scholes (2009) examine the interrelationship between agency-theory and SE. The combination of the two concepts is related with Private Equity-backed buyout. The key issue answered is the relationship between Private Equity-backed buyout types and their added values (Meuleman et al. (2009). Within above context, according to Ireland, et al., (2003) SE is regarded as a concept that views accessing-to-resources as well as abilities to be significant role in creating wealth via growth.

The findings reveal divisional-buyouts in comparison with other types do not show difference in larger profit, even-though changes within growth as well as efficiency are significantly larger. Private equity company experience is found as having positively relationship towards growth but not towards buyouts' efficiency or profitability, whilst this impact is much higher in divisional-buyouts. The significance of this research on SE is to identify the relation of the buyout's type with company resultant growth, thereby connecting accessing-to-resources and abilities to value-creation (Meuleman et al., 2009).

Within their (No.13) empirical research "The impact of strategic entrepreneurship inside the organization: examining job stress and employee retention" Monsen and Boss (2009) examine SE influence on firm's human resources, particularly, on job-stress and employees' desire-to-quit. SE indicates ready-to-change and disruptive-innovation within the firm, two factors that consider the most negative in perception among managers who would like to keep status quo for the firm as well as their regular practices (Ireland, et al., 2003; Covin & Slevin, 2002).

Monsen and Boss (2009) are employing the SE model in Ireland, et al., (2003) and middle-manager model in Kuratko et al., (2005). Managers and employees in this research perceive S.E. in work-place as that of EO, using Covin and Slevin (1989) scale for measurement.

The findings reveal the EO's three dimensions are in general having association to lower intention to quit and role ambiguity, and these oppose to preliminary hypotheses. The explanation could be related with what was suggested by Ireland, et al., (2003) in that effective SE could assist manager in removing the worry in disruptive-innovations and novel business undertakings. Role-ambiguity was confirmed to be a mediating variable between EO and the desire-to-quit. Employees were proven having less reaction towards EO dimensions (Monsen & Boss, 2009).

Within the (No.19) empirical research "The effect of competence exploration and competence exploitation on strategic entrepreneurship" Kyrgidou and Petridou (2012) view SE based on competence exploration and competence exploitation. In their theory, the entrepreneurial elements of SE model of Ireland et. al., (2003) relate to competence exploration whilst its strategic management elements link to competence exploitation, but not the other way around. The outcomes of the study, nevertheless, indicate the result of this hypothesis is not supported.

Within the (No.20) empirical research "Performance of Russian SMEs: exploration, exploitation and strategic entrepreneurship", Shirokova, Vega, and Sokolova (2013) study on Russian SMEs' capability in strategic entrepreneurship (SE) to achieve SCA within a

dynamic business climate. Their suggested SE model encompasses exploration and exploitation.

The findings show a positive impact of specific elements of exploration and exploitation on firm performance. They are the entrepreneurial values (EV) of exploration, as well as investments in internal resources; knowledge management and developmental changes of exploitation. EO of exploration as well as organizational learning and transitional changes of exploitation are not significant predictors to firm performance (Shirokova, Vega & Sokolova, 2013).

As can be seen from the above past studies in strategic entrepreneurship, the empirical studies on SE are somewhat inadequate. The SE model analysis and factors that constitute the concept as well as its impact on company performance are mostly under case-study analyses. The quantitative studies are mostly focused in researching other business aspects within SE context. There are two studies where SE was in representation in EO with its dimensions namely innovativeness, proactiveness as well as risk-taking. Only one article No.20 in year 2013, describes SE as exploration and exploitation activities which must be in equilibrium and concurrent. Exploration is represented by EO and EV whereas exploitation is represented by Investments in internal resources; Knowledge management; Organisational learning; Developmental changes and Transitional changes. It is noticeable that EV is measured by only one question "Indicate on the scale whether Innovations, personal initiatives, creativity, ability to risk and orientation towards market leadership are encouraged in your company" (Shirokova, Vega & Sokolova, 2013).

From the past twenty articles, there is not yet a model which is considered established and employed within empirical researches; topics involved are in big difference as well as do not completely dealing with any particular view on SE. Furthermore, in the last article 20, exploration and exploitation, could be represented with other construct or dimensions. This as such reveals a research-gap on the topic of SE.

2.6 Theoretical, hypotheses development and underpinning theory

To facilitate the study of the relationship between exploration, exploitation and performance of SMEs in Malaysia, the following starts with the development of theoretical framework, hypotheses and subsequently the associated underpinning theory of the framework.

2.6.1 Theoretical Framework

In the SE model by Ireland, et al., (2003), the important elements proposed are: opportunity-seeking behaviour is characterized by entrepreneurial leadership, entrepreneurial culture and entrepreneurial mindset whilst developing innovation and managing resources strategiclly constitute advantage-seeking behaviour, as shown in the following Figure 2.9:

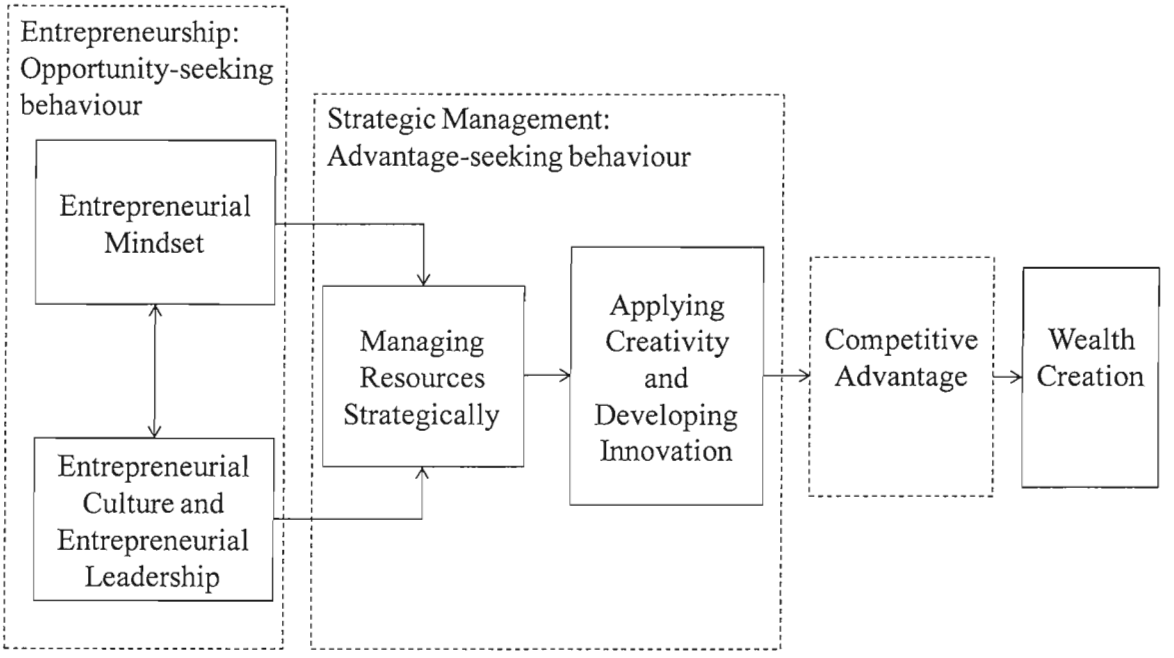

Figure 2.9
A model of strategic entrepreneurship by Ireland et. al. 2003

Schindehutte and Morris (2009) on the other hand, point out entrepreneurship and strategic management have actual manifestation in the activities of exploration and exploitation. They indicate the existence of entrepreneurship of exploration and entrepreneurship of exploitation which are not the same. Likewise, there is strategic management of exploitation which is different from strategic management of exploration. According to Burgelman and, Grove, (2007) entrepreneurship contains the exploration of opportunities as well as applying exploitation to those revealed opportunities, whereas strategic management concerns with the implementation of exploitation to the extant opportunities in main business as well as the exploration of novel growth opportunities.

As mentioned previously, both exploration and exploitation concepts act antagonistically. March (1991) believes exploration concept is concerned with activities to search,

experiment and change so as to ascertain those yet to be known while exploitation concept is dealing with activities to select, implement and be efficient on those things already known and fix.

According to Ireland et al., (2003) in the organisation context, strategic entrepreneurship involves the development of organizational entrepreneurial culture as well as state of mind, investigation of the present company internal resources, implementation of programmes for increasing the required extant resources and performance of strategic management activities, as depicted in Figure 2.9. The company knowledge management plays the supporting and enabling role for the strategic entrepreneurship actions and organizational learning respectively, where the later helps in developing the company internal resources. However, to the critics (Kyrgidou & Hughes, 2010; Schindehutte & Morris, 2009; Ireland & Webb, 2007), the Ireland et al., (2003) model cannot represent combining, balancing and simultaneous engagement of both exploration and exploitation activities. For fulfilling this key feature in strategic entrepreneurship, the researcher therefore propose to view these influences of exploration and exploitation actions onto performance of SMEs as the general theoretical framework in this research, as shown in following Figure 2.10.

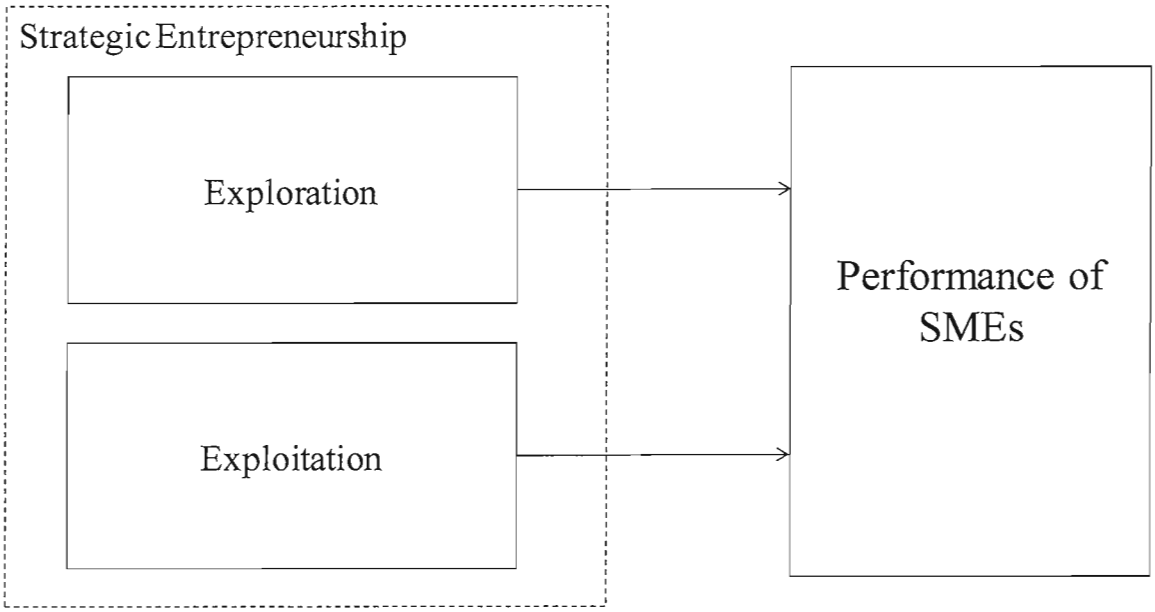

Figure 2.10
The proposed general theoretical framework of current study

2.6.2 Hypotheses

In this section, it comprises of formulation of hypotheses which relates to the variables that represent exploration and exploitation activities.

Exploration is delineated as the "things captured by terms such as search, variation, risk taking, experimentation, flexibility, discovery and innovation" (March, 1991). In other words, to pursue explorative activities, a firm should be innovative, proactive and risk-taking, which can be accomplished via entrepreneurial orientation (EO). Besides, owner/managers/employees should have personal initiatives to seek, creativeness and variation to achieve market leadership, which are embedded qualities in entrepreneurial values (EV). Exploitation, on the other hand, is delineated as "such things as refinement, choice, production, efficiency, selection, implementation, execution." (March, 1991).

These activities and processes can be accomplished via knowledge creation process (KCP).

2.6.2.1 Entrepreneurial orientation and performance of SMEs

Miller (1983) regards entrepreneurial firm as "one that makes product-market innovations; undertakes risky ventures; ahead in proactive innovations and beats the competitors to the punch". He thereby advocates innovation, risk-taking, proactiveness to be the three elements of entrepreneurial orientation (EO) construct. Despite the fact that some other researchers introduce other dimensions into this concept, those three main features of entrepreneurship above still persist in each model of EO (Wiklund & Shepherd, 2005). For example, Covin and Slevin (1991) are adamant that requirement in EO is an environment that promotes aggressiveness, innovation and risk taking. Also Zarah and Neubaum (1998) conclude that EO is "the sum total of firm's radical innovation, pro-active strategic action and risk taking activities that are manifested in its support of projects with uncertain outcomes".

Innovation denotes the "willingness to support creativity and experimentation to introduce new products/services, and novelty, technological leadership and R&D in developing new processes" (Lumpkin & Dess, 1996) contrary to the constituted routines and technological process. Proactiveness reveals those propensities to forecast in continuous manner the potential market's requirements and take the required actions, thereby enjoying the benefits of being the market pioneer (Lumpkin & Dess, 1996). Similarly, Covin and Slevin (1989) define that it is a tendency to take the initiative to compete aggressively with other firms. Risk-taking is defined as the firm willingness in engaging projects with

risk as well as inclination to invest substantial resources on the projects which are not certain on their results (Miller & Friesen, 1982). Covin and Slevin, (1989) regard that business is obliged to take risk but with strategic action in uncertain situation.

Besides, entrepreneurial orientation also signifies some of the features suggested in the model of SE from Ireland et al., (2003). That is, entrepreneurial state of mind or mindset concerns with the way of thinking about business that focuses on and captures the benefits of uncertainty (McGrath & MacMillan, 2000). Uncertainty is a perceptual phenomenon derived from an inability to assign probabilities to future events, mainly due to shortage of information about cause/effect relationships (Hoskisson & Busenitz, 2002). Risk and ambiguity are part of organizational uncertainty (Priem, Love & Shaffer, 2002). Firms capable of successfully managing uncertainty and taking risk, are likely to outperform others who are unable to do so (Brorstrom, 2002). Ireland et al., (2003) introduce numerous entrepreneurial mindset constituents namely: recognization of entrepreneurial framework, real options logic, entrepreneurial alertness and entrepreneurial opportunities. It is observable above constituents have close links with the entrepreneurial orientation key dimensions.

Entrepreneurial leadership is another element in the model of strategic entrepreneurship by Ireland, Hitt and Sirmon (2003). Covin and Slevin (2002) propose the six imperatives of entrepreneurial leadership: nourish entrepreneurial capability, protect innovations threatening the current business model, make sense of opportunities, question the dominant logic, and revisit the "deceptively simple questions", and link entrepreneurship and strategic management. Based on the above requirements, the entrepreneurial

leadership is definitely link to be innovative, proactive and risk-taking, in other words, entrepreneurially orientated.

Majority of the published empirical studies show a positive relationship between entrepreneurial orientation EO and firm performance. Covin and Slevin (1986) has discovered a simple correlation of $r = .39$ ($p < .001$) between entrepreneurial posture and a multivariable measure of firm performance. Besides, other studies also show a positive relationship between entrepreneurial activities and firm performance (Zahra, 1991; Smart & Conant, 1994). In longitudinal study, it is revealed that there is a positive and significant relationship between entrepreneurial activities and return on assets plus return on sales (Zahra & Covin, 1995). According to Wiklund and Shepherd, (2005) each individual EO dimension (innovativeness, proactiveness and risk-taking) influences positively to firm performance. Similarly, further research evidence by Rauch et al. (2009) shows EO dimensions have equal leverage in influencing firm performance and as a result, could be treated to be the summation index for future reseaches.

Based on the above literature, the following hypothesis H1 is thereby established:--

H1: Entrepreneurial Orientation is significantly related to performance of SMEs.

2.6.2.2 Entrepreneurial values and performance of SMEs

To Dess and Picken (1999), "organizational culture is a system of shared values(i.e., what is important) and beliefs(i.e., how things work) that shape the firm's structural arrangements and its members' actions to produce behavioural norms(i.e., the way work

is completed in the organization)". Specifically, entrepreneurial culture with effectiveness encourages one to be innovative, creative, willing to take risk, and continuously changing at the same time tolerance with no success (Ireland et al., 2003).

According to Ireland and Webb, (2007) in exploration, firms seek to discover new opportunities, where the process involved inherently comes with risk and uncertainty. Firms thereby need an entrepreneurial culture that transforms this uncertainty into constructive entrepreneurial behaviours rather than the undesired stress and rigidity.. In other words, entrepreneurial culture has relation with entrepreneurial orientation exhibited in the firm and the workers on innovativeness, proactiveness and risk-taking but the entrepreneurial values have emphasis on the employees' dedication towards entrepreneurial behaviour particularly on exploration. Entrepreneurial values are an intricate phenomenon consisting of the need for achievement (McClelland, 1961), risk propensity through tolerance for ambiguity (Hisrich, Michael & Dean, 2005; Gibb, 2007), perseverance (Alsaaty, 2007), self efficacy (Rotter, 1966) and persuasiveness (Busenits & Lou, 1996).

There are a few earlier studies pertaining to the entrepreneurial values in relation with SMEs' growth performance. These researchers regard entrepreneurial values as variable analogous to the entrepreneur's characteristics (Kolvereid & Bullvage, 1996), personal traits (Adams & Hall, 1993), and entrepreneur's personality (Gibb & Davies, 1990). However, other researcher like Janssen (2006), has disputed that variable pertaining to the entrepreneur's personality or traits, propagated by Adams and Hall (1993); Gibb and Davies (1990), is not a significant predictor of business growth performance. Other

researchers (Ireland & Webb, 2007; Alsaaty, 2007; Hisrich, Michael & Dean, 2005) have also visualized entrepreneurial values instead of personality traits, to be the acceptable variable that influence on the growth performance of SMEs. Also Drucker (1986) links the entrepreneur's success relies on behaviour as well as personal traits but without adequate explanation especially on the personality part. The need of achievement, creativity and innovation (Schumpeter, 1934; Sombart, 1950); achievement orientation, self responsibility, hardworking, and perseverance (Birley & Muzyka, 1997), have influence on one desire to seek accomplishment on their work performances.

Similarly, Tambunan (1992, 1994) indicates albeit unemployment and low education level are key factors to inspire people to become entrepreneurs, these are meant for business entry only but not for the firm growth performance. Likewise, other factors like generating income (Keeble & Wever, 1987); the owner/manager's value as well as self-employing (Gibb, 1996); unemployment and profits (Tervo & Niittykangas, 1994); wealth creation to family, self esteem, and aspiration to be business's owner (Nelson & Mwaura, 1997); as well as enterprise's growth (Kantilal, 1994), only encourage people to become business owners but not the desired predictor on growth performance.

However, Ray (1986) clarifies that risk taking plus self-esteem are the significant predictors for successful business, and disputes very low self-esteem might be the obstacle to even start a business. Besides, Gibb and Davies (1990) agree that entrepreneurial characteristics are the important factor to the growth of business. It is applicable from start-up with high uncertainty to the innovation of the sustaining business

activities and expansion. Gill (1985) disputes that hindrances to venture into business, are those pertaining to psychology reasons for example the fear factor for initiating a venture.

Bandura (1977) argues the most important entrepreneurial values for business success are goal orientedness and self efficacy. The reason is that they form the key linkage between intention and action. As goals help drive attention and effort toward activities which are related to the goal and disregard activities which are not related, they thereby also influence the performance and behaviour in a directive role. Rauch and Frese, (2000) support this argument by highlighting the value of goal orientedness and self efficacy is stronger amongst committed individuals. In other words, committed individuals pay significant concern on the outcome (how important is it to succeed) and how closely their success is within their anticipation (self-efficacy) as this helps to impede pessimistic inclination and develop a mental map towards success. One can have high self-efficacy pertaining one task but it may be low when it comes to another task. This is because such values are usually influenced by experience in a given task or venture. A recent research by Abaho (2013) about entrepreneurial values of University students in Uganda, conclude that entrepreneurial values framework is consisted of visionary, self-efficacy, economic frugality, leadership orientation, high levels of networking behaviour, information seeking and cosmopolitanism.

Clark, Berkeley and Steuer (2001) declare with absolute certainty that the attitude and behaviours of entrepreneurs are influencing on or impeding the growth of SMEs. For instance, they mention that business will grow if the owners' interests are to sustain their firms at a comfortable level. Kolvereid and Bullvage (1996) have indicated

entrepreneurial individual is regarded to be core factor in the journey of growth. Entrepreneur's action is the key to company growth (Pendeliau, 1996; Petrakis, 1997). Montagno, Kuratko and Scarcella (1986) cite the prominent difference of entrepreneur's characteristics that lead towards the various degrees in entrepreneur's success. Also Johnson (1993) shows the entrepreneurial positive behaviours can bring about start-up, survival, and growth of firms.

The main observation from the above literatures is firm which has developed entrepreneurial values favouring exploration would be continually progressing, innovative as well as seeking novel opportunities in shoring up earnings and sustain growth. As these exploration activities are conducted constantly, there will be certain results shown in the growth of firm performance even in the short term. Hence, the following hypothesis is formulated for the present study:

H2: Entrepreneurial Values are significantly related to performance of SMEs.

Together both H1 and H2 constitute the exploration which can be illustrated in the following Figure 2.11:

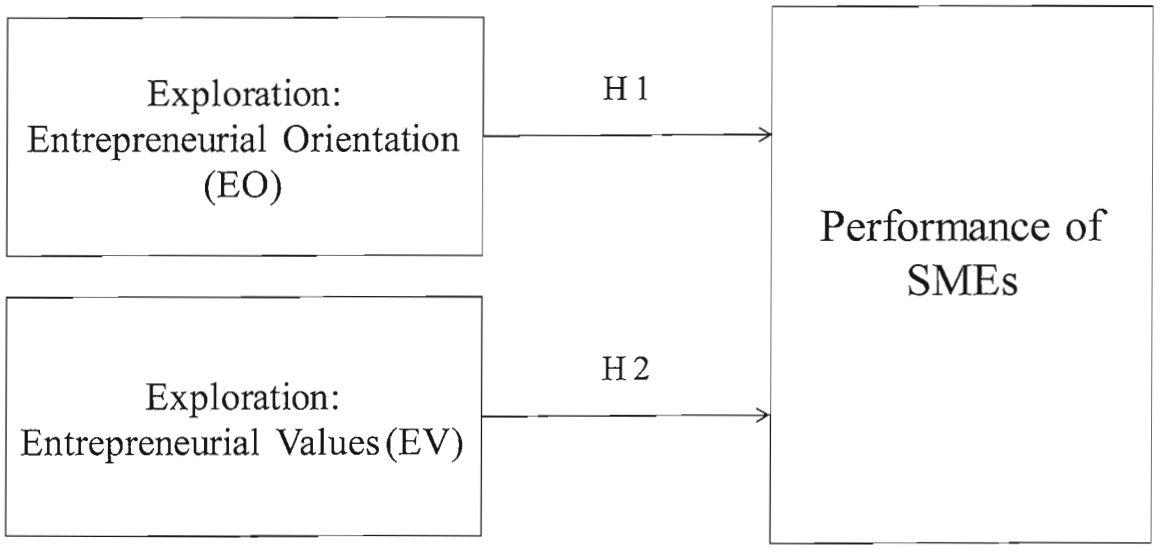

Figure 2.11
Illustration of H1 and H2

2.6.2.3 Knowledge creation process and performance of SMEs

Exploitation is delineated as "such things as refinement, choice, production, efficiency, selection, implementation, execution." (March, 1991). Kale, Singh, and Perlmutter (2000) discover that through alliances and networks, progressively firms are developing knowledge that is vital for innovation (i.e., exploration) and for the implementation (i.e., exploitation) of corporate entrepreneurship strategies. This is also very true to strategic entrepreneurship in SMEs. According to Hitt, Sexton, Ireland and Camp (2002), the experience (e.g., tacit knowledge) of managers together with the internal and external social networks may offer essential inputs to bisociation which is the combination of two unrelated sets of information and resources. Smith and Di Gregorio (2002), argue that entrepreneurial firms can employ bisociation to generate creative action. Thus, both individual and organizational aspects influence entrepreneurial and strategic activities that are engaged by firms. As mentioned earlier, Kyrgidou and Hughes (2010) emphasize that

organizational learning is important factor for adding into the SE model as it could cause enhancement of firm activities related to exploitation.

According to von Krogh, Ichijo, and Nonaka (2000), knowledge is justified true belief which forms the key intangible resource that assists firms to identify and especially exploit opportunities to establish competitive advantages. Ireland and Webb (2007) indicate that the intimate or tacit knowledge held by employees involved with exploitation activities is usually adequate to guide the firm's incremental innovation. However, firms do not always possess all the required resources (especially critical knowledge) needed to exploit global markets in a timely manner. Thus, exploitation activities must include such factors in knowledge creation process using the model from Nonaka (1994): "socialization, externalization, combination, and internalization (SECI)".

Resource advantage concept identifies knowledge to be the strategic company resource (Teece, 1998; Hunt & Morgan, 1996; Grant, 1996; Hunt, 1995). A firm which is capable of creating and exploiting knowledge has no issue to build sustainable competitive advantage because knowledge is characterized by "heterogeneity, uniqueness, and immobility" (Hunt & Arnett, 2006; Zack, 1999; Grant, 1996; Barney, 1991). Many earlier researches have shown the significant role of knowledge creation in the successful firms (Nonaka & Takeuchi, 1995; Matusik & Hill, 1998; Malhotra, & Segars, 2001; Chia, 2003; Gold, Kogut & Zander, 2003). Firms that exploit KCP could associate knowledge by novel as well as creative approaches, thereby offer competitive appeal for the clients (Lee & Choi, 2003; Nonaka & Konno, 1998; Hunt & Morgan, 1997).

According to Nonaka, (1994) in theory of knowledge creation, dynamic interactivity between explicit and tacit knowledge is creating knowledge within the process of SECI. The process of socialization aims in garnering tacit knowledge embedding within each individual. According to Nonaka, Toyama and Konno, (2000) frequent social perception and interaction assist firm's individuals in sharing experiences and mentality modes. According to Becerra-Fernandez and Sabherwal, (2001) there is empathy among employess in exchanging various knowledges to perform their task as well as to solve problems. And this according to Nonaka, Toyama and Nagata, (2000) will reduce communicating obstacles among employees. According to Nonaka and Takeuchi, (1995); Nonaka, Toyama and Nagata, (2000) within socialization process, firms could be converging and intensifying tacit knowledge for enhancing learning collectively, thereby improving the knowledge database.

For the employees, the comprehension of task will be much better after tacit knowhow is transformed into explicit knowledge. It is externalization process that is facilitating individuals in articulating ideas and reflections (tacit knowledge) into substantiate concepts and views (explicit knowledge), which are required in novel product development as well as innovation. The generated novel explicit knowledge will then be integrated as well as circulated within the team and also to other level of organisation (Nonaka, Toyama & Konno, 2000; Nonaka & Takeuchi, 1995).

According to Nonaka, Toyama and Nagata, (2000) companies could employ combination process in creating novel knowledge with present knowledge, thereby producing novel knowledge application. Novel knowledge and expertise could increase the company's

capability in innovating novel products and services, or enhancing the efficiency of current ones, which leads to minimising costs as well as reducing redundancies (Lee & Choi, 2003; Gold et al., 2001; Grant, 1996).

According to Nonaka, Toyama and Konno (2000), with internalization process, knowledge will then transform into the company's database and actualize into operational practices like those in production procedures or new product development (NPD). Company uses the human capital in transferring tacit knowledge which forms the basis to innovate further and generate novel procedure (Nonaka, Toyama & Nagata, 2000; Kogut & Zander, 2003; Lee & Choi, 2003). As such in KCP, the model of SECI facilitates the conversion of knowledge into valuable assets in business thereby contributes into innovative product or improvement in process (Nonaka, Toyama & Konno, 2000; Lee & Choi, 2003).

There is significant finding where the creation of knowledge via model of SECI is triggering a novel spiralling effect on the knowledge creation. The interactive communal societies could be transcending organization borders in transferring and utilizing knowledge embedding within various stakeholders like customers, suppliers, distributor, as well as competitors (Nonaka, Toyama & Konno, 2000; Nonaka, 1994). This knowledge transformation allows companies for the integration of emerging-knowledge with the strategic development (Nonaka, 1994), plus they could be creating novel knowledge as well as developing novel product faster and cheaper than competitors (Droge, Claycomb & Germain, 2003). As such, according to Nonaka, Toyama and Nagata,

(2000); Chia, (2003) knowledge creation process allows companies a chance for enhancing competency as well as achieving sustaining competitive advantages.

Based on the above literatures, once companies have superiority in knowledge creation via SECI model, they have more propensities for realizing exploitation activities in efficient manner while achieving growth as well as profit. It can be therefore proposed knowledge creation process (KCP) is a critical predictor of performance of SMEs, with the following hypothesis H3 and illustration in Figure 2.12.

H3: Knowledge creation process is significantly related to performance of SMEs.

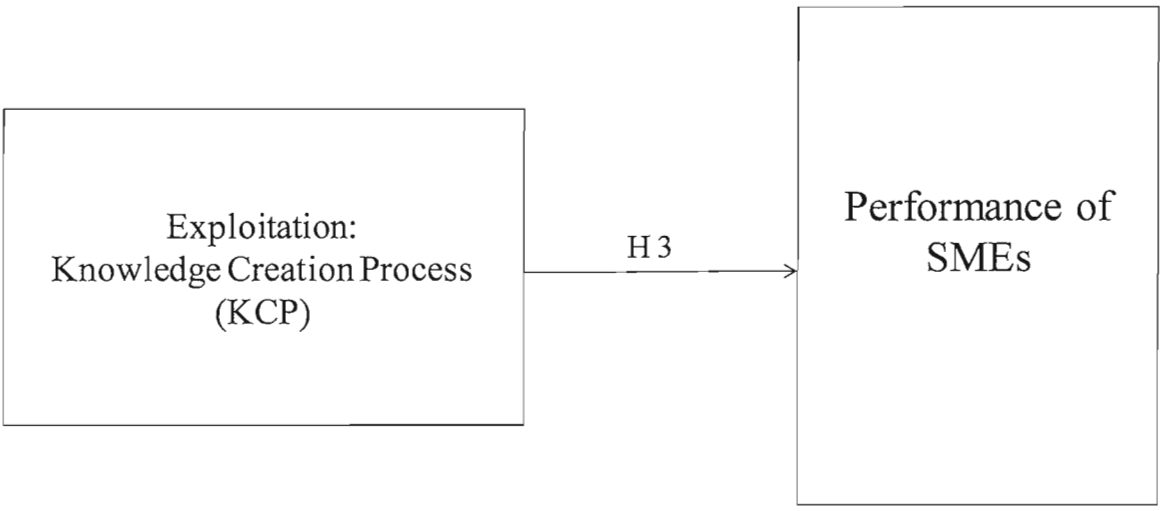

Figure 2.12
Illustration of H3

2.6.2.4 Strategic entrepreneurship and performance of SMEs

Very often SE is treated to be a method in balancing two dissimilar tactics for example strategic management and entrepreneurship (Ireland et al., 2003), or from another perspective, exploration and exploitation (Schindehutte & Morris, 2009). While focus

only on exploration can cause many undeveloped ideas and undeveloped competence, concentration only on exploitation can generate a 'competency trap' and forbid the firm from necessary reformations and innovations (March, 1991). The successful balance of both should then boost performance by rendering a firm innovative, flexible, and effective without losing the grips on stability, established procedures, and efficiency (Simsek, 2009). One avenue for this balancing is through ambidextrous organization which means an organization that could handle management of tradeoffs between contradictory requirements with proper placement of "dual structures" effectively (Duncan, 1976) capable in supporting both patterns of learning significantly having exploration and exploitation in balance. Exploration and exploitation process are antagonistic in organisational structure and culture. Thus for seamless transformation between these two processes, since SMEs are small in size and human resources, ambidextrous organization can be achieved by having owner/manager as the interfacing manager position(Ireland & Webb, 2007).

The model of strategic entrepreneurship is thereby comprised of both exploration (represented by EO and EV) and exploitation (represented by KCP) variables which lead to increase performance of SMEs. Thus this study is also hypothesized the influence the three independent variables (Entrepreneurial Orientation EO, Entrepreneurial Values EV and Knowledge Creation Process KCP) which together represent the strategic entrepreneurship on the growth performance of SMEs. As shown in the following Figure 2.13, the final theoretical framework of this study is:

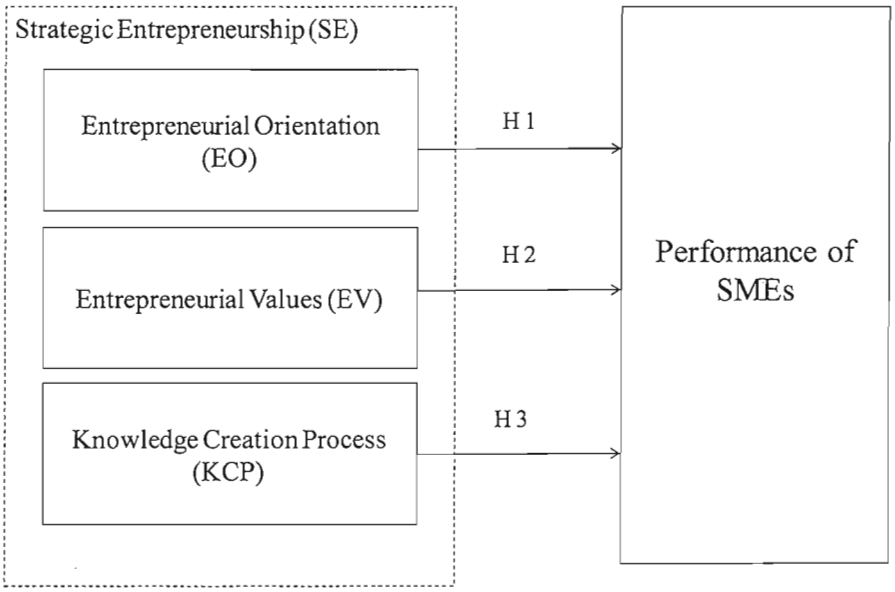

Figure 2.13
Final theoretical framework

2.6.3 Underpinning Theory of the framework: RBV

Lately the firms' resource-based view (RBV) has been expanded to address the issues on their key capabilities (Amit & Schoemaker, 1993; Barney, 1991; Peteraf, 1993), and complicated packaging of resources that generate obstacles for competitors (Barney, 1991, 2001). According to Mahoney and Pandian, (1992) the resource-based view gives a method enlightening the intrinsic leads for the company growth, encompassing tactic, company's economics and industrial association. The RBV perception is of special attention as it highlights the function that intangible resources might have in generating sustainable competitive advantage (SCA). Companies of below average size might attain competitive advantage via resourcefulness in obtaining resources from wide range of outside supplies and in resource integrations strengthening their competitive standing in the market (Borch, Huse & Senneseth, 1999). As such the strategic entrepreneurship

process has to be in equilibrium with the features of SMEs (Mauri & Michaels, 1998; Brush, Greene & Hart, 2001) and strategy execution (Ireland et al., 2003).

In short strategic entrepreneurship (SE) researchers are frequently engrossing with resources, competitive advantages and company performance (eg. efficiency, growth and profit). Most of the researchers reckon facets of the RBV, and it is even difficult to look for a study that does not utilize some portions of resources (Hitt et al. 2001, 2002; Ireland & Webb, 2007; Baron, 2007; Smith & Cao, 2007; Kyrgidou & Hughes, 2010; Kyrgidou & Petridoh, 2011; Luke, Kearins & Verreynne, 2011). As such, a delineation of balancing and resource diversification turns out to be essential. To facilitate the RBV being more dynamic, thoughts of knowledge become important (Baron, 2007; Shepherd, McMullen & Jennings, 2007; Busenitz, 2007), as well as vibrant abilities (Kyrgidou & Hughes, 2010; Luke et al., 2011).

a. The resource based view and strategy entrepreneurship

As mentioned earlier, majority of researchers in all realms of strategic entrepreneurship study, employ resources as their unit of analysis at the company level. In doing so explicitly or implicitly, they extract thoughts inside the recourse based view (RBV) (e.g. Guth & Ginsberg, 1990; Zahra & Covin, 1995; Mosakowski, 1998, Hitt et al. 2001, 2002; Ireland & Webb, 2003; McFadzean, O'Loughlin & Shaw, 2005; Baron, 2007; Ireland & Webb, 2007; West, 2007; Smith & Cao, 2007; Yiu & Lau, 2008, Kyrgidou & Hughes, 2010; Kyrgidou & Petridou, 2011; Luke et al., 2011). Moreover, many of these researchers have an affinity to pose their study inside the entrepreneurial function of Schumpeter and his concepts about innovation as a steering force for change, which is the

established economic school of thought (e.g. Hitt et al. 2001, 2002; Ire-land & Webb, 2003; 2007). This entrepreneurial function is strongly tied to the RBV. As such Schumpeter (1934) converses the idea that novel innovations could be discovered in new resource arrangements. Actually there is no rival view to the RBV that could be established among the researches in this literature review. Hence, even trying to explain with other views and/or concepts, the resource view is still existed in certain aspect.

The fundamental thought in the study of strategic entrepreneurship is that of opportunity-seeking and advantage-seeking behaviour. The former conforms to entrepreneurship discipline whereas the latter relates to strategic management discipline. Both processes require deliberation in unison. According to Newbert, (2007); Acedo, Barroso, and Galan, (2006) within strategic management, the concept of resource based view (RBV) prevails. Furthermore, RBV has leverage in some other disciplines in management study, for example organizational theory, technology management, human resource management as well as international management. Thus, RBV obviously imposes considerable influence to the management procedure via associated thoughts on capabilities, core competencies, etc. RBV comprises of a wide set of thoughts. As such, a few scholars employ the expression in a limited scope for a set of thoughts rooted in conventional economics regarding the required situations to attain sustaining competitive advantages (SCA). Other scholars employ RBV in much extensive manner by tracing company performance to company "resources," as well as those thoughts in "capabilities", "core competencies" and "dynamic capabilities," which derive from rather unorthodox thoughts within sociology, cognitive-sciences and economics (Foss, 2011).

The entrepreneurship literature has been disparaged for having too worried about the process of embarking novel business idea not counting on the strategic aspect of (Hitt & Ireland, 2000; Hitt et al., 2003). Insufficient focus has been applied by the competitiveness of novel business thought and the strategic constituents that should be incorporated in the entrepreneurial undertaking. To those larger organizations, the entrepreneurial undertaking might entail great loss and conflict with current strategy functioning. As such it is usual that the strategic aspect is of vital significance in SMEs (Borch et al., 1999; Zahra, Jennings & Kuratko, 1999; Messeghem, 2003).

The starting points of the RBV can be traced in the study by Edith Penrose (1959) who elucidated how companies may extend into disparate fields in an associated approach derived from surplus in company-specific resources. He also indicated that different companies would find out how to derive diverse services from the similar type of resources, and underlined those "productive opportunities" to a company that are obvious to the key decision makers (e.g., Kor & Mahoney, 2000). Economic scholar Harold Demsetz (e.g., 1982, 1973) is the other pioneer in resource based view, where his study of economics in industry emphasized, amongst others, how company-specific leverages could compel, concurrently, a propensity for enhancing industrial deliberation and large profits. Demsetz also gave details how that leverages might draw from superior information.

Let review the way Penrose and Demsetz proposed thoughts that seemingly gearing towards entrepreneurship phenomenon. Demsetz and Penrose relate outstanding accomplishment with exclusive insights which cannot be emulated with ease. In particular,

Demsetz (1973) credits outstanding accomplishment is when company management able to combine high uncertainty with unique insight (or luck). Likewise, according to Casson and Wadeson, (2007) entrepreneurship study within management and economics view entrepreneurs as persons that able to obtain "cheaper" information as compared to others, or exclusive information concerning, say, consumers' potential trends (Rumelt, 1987; Mises, 1949; Knight, 1921). Entrepreneurship comprise of employing that exclusive information to implement decisions on resources usage in servicing markets in order to grasp opportunities, which are, up till now yet to be identified as chances of snatching a return (Foss, 2011). All in all, one would anticipate that when RBV intersects with entrepreneurship study it forms the foundation of strategic entrepreneurship (Foss, 2011).

i. The resource based view and entrepreneurship

With the portrayal of entrepreneurship, it would instantaneously look like there are numerous associations with resource based view (RBV). Similar to resource based view, entrepreneurship relates with taking advantage of unique insight or information aiming to make a return, if possible sustaining over a longer period. Therefore, according to Mosakowski, (1998: 626) entrepreneurial results are also competitive results, which they bring about the making of goods or services in cheaper manner or better qualities than that of competitors'. In exploiting opportunity, typically entrepreneur brings together various resources, which as a minimum one of the resources must be specifically cater for that opportunity. The entrepreneur would frequently adapt this basis of resource in pursuing opportunity. The insight or his unique knowledge is sometimes so 'tacit' to the entrepreneur that he may find it very tough to articulate to external partners like venture

capitalists, angel investor and other sources of financing. According to Sarasvathy's (2008) approach of effectuation, typically entrepreneurs do not start with analysis in segment or industry based on Kotler/Porter theory; instead it is the resources they start with, which among others, include their network connections in the industry. Likewise, according to Barney, (1986) the RBV emphasizes that strategy starts from company resources analysis instead of from Porterian industry analysis.

Therefore, changes in the resource-base, resource assembly, dynamics, uncertainty, tacit knowledge and idiosyncrasy, which are keys to entrepreneurship, also applicable with the case in those strategy based on resource. The famous researcher in resource-based view, Kathleen Conner (1991) ever indicated twenty years ago:

> "In a resource-based view, discerning appropriate inputs is ultimately a matter of entrepreneurial vision and intuition: the creative act underlying such vision is a subject that so far has not been a central focus of resource-based theory development (p. 133-134)"

ii. The resource based view and strategy management

According to Foss, (2011) the creation and sustaining of competitive-advantage relate closely with strategic management. The definition of strategies might refer to the creation of sustained competitive advantage (SCA) planning. As such to strategic management researchers, the key DV or core factor to be explained in strategy study is SCA. The definition of SCA could refer to the company's capability in creating and appropriating added-value as compared to the competitors in a sustaining manner. That is to say, SCA is

more often than not, construed as a company-level phenomenon, which emerges from the interactivity among various key resource owners. However, possessing a SCA does not definitely convert to oustanding performance in financial aspect as it is just a latent in achieving that kind of performance (Foss, 2011).

The characteristic of RBV can be traced by the latent in creating and appropriating added-value, as compared to competitors, into the companies' resource provisions, as well as these resources' characteristics (Foss, 2011). To RBV, its uttermost accomplishment is in formulating the requirements which have to be fulfilled together to achieve SCA via resources (Peteraf, 1993; Peteraf & Barney, 2003; Barney, 1991). With respect to this, Jay B. Barney contributes seminally in his 1991 paper: "Firm resources and sustained competitive advantage", which is considered one of the highest influencing articles on strategic management. According to Barney, (1991):

> "A firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy (p. 102)"

The definition of SCA relates to circumstances where all competing efforts to imitate or substitute a victorious company fail. According to Barney, (1991) companies in controlling of resources which are rare, valuable, inimitable and non-substitutable can enjoy SCA. These factors constitute the famous "VRIN framework," or, "VRIO framework" with the addition of organization resources as ("O") (Barney, 1991).

Note: VRIN = Valuable, rare, inimitable and nonsubstitutable.

b. The resource based view and firm growth

The idea of RBV of a company was initially started to be an effort in developing a reliable base pertaining to the business strategy classical concept (Wernerfelt, 1984; Penrose, 1959). RBV enhances the comprehension in the way resources being employed and joined in creating competitive-advantage. RBV contributes in the description of sustaining dissimilarities in company profitability that cannot be associated with industry conditions. The RBV gives an enlightening universal theory of the company growth (Wernerfelt, 1984).

A company can be regarded as assemblages or packages of resources and abilities. By having efficient usage of these packages of diversity or distinguish competence, a company might attain an extra rent or return (Penrose, 1959). A company's present resources will affect managerial insights and hence the approach for growth (Wernerfelt, 1984). It is the resources of the company that will restrict the selection of markets it may go into, and the amounts of returns it may anticipate. Contemplating on creative combinations of resources, one might opportune to developing competitive advantage in smaller companies which might be absence in the similar opportunities for new venture as their bigger opponents (Wernerfelt, 1984).

2.7 Chapter Summary

In this chapter two, it begins with the description of the SMEs in Malaysia which include the SME definitions and facts from Economic Census 2011. This is then followed by a

number of theories and research models of the growth performance of SMEs. The literature review subsequently indicated that there are a number of views on strategic entrepreneurship, which majority gear towards opportunity-seeking and advantage-seeking behavior that require combined theories in entrepreneurship and strategic management. However, a few scholars argue that it is actually a balance of exploration and exploitation activities which correspond to the firm's capability to explore opportunities internally plus externally, and allow the sustaining of wealth creation.

Small quantity of empirical studies indicated inadequacy in study of this subject. The theoretically developed models empirical analysis corresponds to an obvious research gap. The fact that empirically the researchers have a propensity for lessening the strategic management into EO only indicates there is insufficient instrument to measure. To address this, there is necessity for seeking solid measurable variables representing the concept.

This SE model was thus developed plus variables delineating exploration as well as exploitation were recognized. The empirical analysis of these variables influencing on company performance was carried out. Entrepreneurial orientation (EO) and entrepreneurial values (EV) constitute the exploration, whereas knowledge creation process (KCP) represents exploitation. Strategic entrepreneurship corresponds to integration of exploration and exploitation was suggested to impact positively to the company performance. In the last section, the researcher presented the research framework, development of hypothesis and the underpinning theory of the framework.

CHAPTER THREE : METHODOLOGY

3.1 Introduction

This chapter encompasses the research methodology and design used to gauge the developed or identified hypotheses of the relationship. It begins with the exploration of the past and present research methods, after which the operationalization of the variables with definitions and instrumentation. Then follow the explanation of the sampling procedure, the reliability and validity, the data collection procedure, pre-test/pilot test and finally the rationale behind the choice of various data analyses.

3.2 Research Design

Making sure the research design correct is prerequisite to a well organised and hence excellent research. The research design forms the research structure as well as connects together all the research essentials. It allows the research to be carefully mulled over and planned for the best approaches.

3.2.1 Overview of Research Method in past SMEs and SE studies

To choose the right research design methodology for this research, the researcher re-examine the approaches employed by scholars in the past studies of SMEs and SE. Nevertheless, from the several definitions of research design methodologies on SMEs and SE, the researcher realised that there is none of the definitions that to embrace all facets of this research. A research design is a scheme or comprehensive plan on how a research study is to be done via the operational variables which can be evaluated, sampled, and data-collected for assessing the hypotheses (Thyer, 1993). In addition, research design is

regarded as a guideline or a general scheme for adopting the phenomenon of interest in a systematic investigation (Robson, 1993). Also, according to Kumar, (1996) research design is referred as the scheme that describes how the researcher will look for answers to his research questions.

3.2.1.1 Exploratory research and Qualitative analysis method

Many earlier researchers have conducted diverse research methodologies pertaining to the SMEs growth performance and SE. For example Gibb and Davies (1990); Hay (1992), Johnson (1993); Olsen and Johannessen (1994); Chow and Tsang (1994); Goh and Chew (1996); Withane (1996), Dijk (1997); Jan, Sab and Shaari (1998); Latif and Shanmugam (1998); Luke and Verreynne (2006); Luke, Kearins and Verreynne (2011), carry out their studies that depended on the exploratory type of methodologies. Exploratory research methodology can be performed to comprehend the concept and/or establish the research methodology that hinge on the qualitative analysis from the observations, interviews, secondary data sources, focus groups, pilot study or case study for the ensuing research measurement (Kumar, 1996; Cooper & Schindler, 2001; Babbie, 2004; Sekaran, 2006). Gibb and Davies (1990) for example, adopt the secondary data of literatures to build up a theoretical model of small business growth and they evaluate the findings using the qualitative method. In the research of obstacles to small company growth, Hay (1992) also adopts the exploratory research to gauge the viability of the study. Hay clarifies the research problems and decided on the most suitable methodology so that a more complete research could be arranged. Luke and Verreynne (2006); Luke, Kearins and Verreynne

(2011), employ exploratory research using multiple case studies and qualitative analysis method in studies of SE.

In reality, instead of exploratory research, majority of studies are a mixture of other classifications of researches: descriptive, correlation, and explanatory research (Kumar, 1996). Sekaran (2006) elucidates that "exploratory research was performed when a researcher had little knowledge about the situation or had no information on how similar problems or research issues had been solved in the past". As such for this study, the researcher has decided not to adopt this exploratory research methodology.

3.2.1.2 Descriptive, Survey research and Quantitative analysis method

The researcher realise that many researchers in past researches on SMEs and SE used the descriptive, survey research and quantitative analysis method to examine their studies (Montagno, Kuratko, & Scarcella, 1986; Smallbone, 1990; Terpstra & Olson, 1993; Levy, 1993; Fulop, 1994; Teo & Cheong, 1994; Kim & Choi, 1994; Tan & Tay, 1995; Lyles, Baird & Orris, 1995; Wijewardena, Cooray, 1996; Kolvereid & Bullvage, 1996; Webster & Boring, 2000; Susanti, 2002; Doan The, 2002; Messeghem, 2003; Patzelt, Shepherd, 2009; Audretsch, Lehmann & Plummer, 2009; Meuleman, Amess, Wright & Scholes, 2009; Monsen & Boss, 2009; Kyrgidou & Petridou, 2012; Shirokova, Vega & Sokolova, 2013). Among these researchers, some have shown their results with reference only to the descriptive statistics whilst other researchers tested their hypotheses by regression analysis for corroborating the relationship between independent and dependent variables. For instance, Webster and Boring (2000) employ mail questionnaires and descriptive

statistics (means, medians, ranges, and frequencies), whilst Levy (1993) uses field survey (questionnaire interviews) and means or percentages to evaluate their findings.

However, Tan and Tay (1995); Teo and Cheong (1994); Lyles, Baird and Orris (1995); Kolvereid and Bullvage (1996); Monsen and Boss (2009); Kyrgidou and Petridou, (2012); Shirokova, Vega and Sokolova (2013), employ mail questionnaire as a vital instrument to collect data, where data could not be reached by other means or sample size is too large for other statistical tool to evaluate the results. Tan and Tay (1995) try to do research on the factors influencing the growth of SMEs and constructed the regression model. Teo and Cheong (1994), in the research of "difficulties faced by SMEs in obtaining financing" employ the descriptive statistics. Their initial plan is to run the regression statistics with the data but due to the small sample size returned, they have subsequently employ the Mann-Whitney test or a non-parametric test that permits comparison between two samples. Lyles, Baird and Orris (1995), in the assessment of venture creation and growth, have employed descriptive statistics to measure the qualities of entrepreneurs. They perform the t-test and chi-square test to compare the differences of the samples, and adopt stepwise regression process to predict which variables should be remained. Kolvereid and Bullvage (1996), in contrast, use t-test, chi-square test, and one-way analysis of variance to testify their results on the growth of SMEs. On the research on SE, Audretsch, Lehmann and Plummer (2009), employ survey research with published documents of 127 CEOs of new ventures. Similarly Meuleman, Amess, Wright and Scholes (2009), also adopt survey research with 238 buyouts studied via 3 databases. Both SE studies, use hypothesis and chi-square tests for analysis.

3.2.1.3 Combining Survey with Case Study research

The researcher found that some researchers are keen in combining the survey and case study methods or employed a multiple case study methods in their studies (Kazanjian, 1988; Marshall, Leong, Choo, Koh & Thay, 1995; Nelson & Mwaura, 1997; Cunningham & Ho, 1994; Romano & Ratnatunga, 1995; Ramachandran, Mukherji & Sud, 2006). Kazanjian, (1988) employs a combination of case study and survey methods, trying to discover the relationship of dominating problems to the company growth. Marshall et al. (1995) and Nelson and Mwaura (1997) use case study to corroborate their survey results. Marshall et al. (1995) employ a combination of survey method and case study to carry out the statistical analysis, as their sample size was small. Nelson and Mwaura, (1997) on the other hand, adopt means, percentages, correlation, and t-test to analyze findings and used case studies to corroborate the results. Cunningham and Ho (1994); and Romano and Ratnatunga (1995), meanwhile, employ only the multiple case study design to showcase their results via the qualitative research methods. In SE study, Ramachandran, Mukherji and Sud (2006), carried out multiple case-studies in two pharmaceutical firms in India via the internalization procedure. However, according to Mohd Shariff, (2003) employing the case study method alone might not bring about clearly in determining the relationship between the independent variables and the dependent variable.

Therefore, in sum, the researcher found that from the numerous research-design methodologies employ by past researchers about the growth of SMEs and SE, look like some are in common even though they may have differences. Quite a number of the past researchers employ research survey design or a combination with case study while others

try to adopt exploratory research design in their studies (Kumar, 1996; Cooper & Schindler, 2001; Babbie, 2004; Sekaran, 2006).

3.2.2 Present Research Method

Among the research methodologies discussed earlier, the researcher chooses the survey research with quantitative analysis method as the most appropriate methodology for this study. According to Montagno, Kuratko, and Scarcella (1986); Smallbone (1990); Terpstra and Olson (1993); Levy (1993); Baker (1994); Fulop (1994); Teo and Cheong (1994); Kim and Choi (1994); Tan and Tay (1995); Lyles, Baird and Orris (1995); Wijewardena and Cooray (1996); Kolvereid and Bullvage (1996); Kumar (1996); Webster and Boring (2000); Cooper and Schindler (2001); Susanti (2002); Doan The (2002); Mohd Shariff (2003) and Babbie (2004); Sekaran (2006); Sumaiyah and Mahmood, (2011); June and Mahmood, (2011); Kyrgidou and Petridou, (2012); Shirokova, Vega and Sokolova, (2013); Singh and Mahmood (2014), the survey methodology in quantitative research is the significant method for the research study. As such, the motives and the process within this methodology are examined in more detailed in this section of chapter.

Survey methodology is the most practical research method when the researcher involves in analysis on particular features of existing phenomena (Hair, Bush & Ortinau, 2003). It is quantitative analysis in nature as it reclassifies problems and objectives inside the primary data source via a series of standardized or structured questions from the big population. It uses the quantitative analysis to ascertain the details of relationships and dissimilarities in phenomena (Calmorin and Calmorin, 2001). The survey methodology

inclines to be in the mainstream of the social research (Baker, 1994; McTavish & Loether, 2002; Babbie, 2004) as well as business and management research (Zikmund, 1991; Cooper & Schindler, 2001; Hair, Bush & Ortinau, 2003). Survey method can be very beneficial to research due to its capability to handle huge sample sizes at relatively low cost. Its benefits also include the simplicity of administering and assembling of the quantitative data that are organized for advanced statistical analysis. According to Zikmund, (1991) the problems of survey method can be related to random sampling errors and non-random sampling errors.

In this research, the researcher has selected the quantitative research approach as proposed by Leedy and Ormrod (2005). To study about relationships among measure variables with the purpose of explaining, predicting and managing phenomenon, quantitative research approach have to be employed (Leedy & Ormrod, 2005). According to Homa (1994), it exercises deductive reason to elucidate and infer the natural and social phenomenon. It also uses numeric data which comprises of predetermined means, and also gives closed-ended questions. According to Creswell, (2003) quantitative methods are very helpful to evaluate or verify theories; find out significant variables for future study; associate variables set by questions or hypotheses; employing criterions of validity and reliability and statistical processes.

3.2.2.1 Present Data Collection method

Based on the required data sources, researcher re-examines the literature to find the suitable way for data collection. Sekaran (2006) elucidates that the most universally used data collection methods were interviews, questionnaires, and observation, and gave more

proposals, which each method can be most advantageously employed, as shown in Table 3.1 below.

Table 3.1
Advantages and disadvantages of modes of data collection

No.	Mode of data collection	Advantages	Disadvantages
1.	Personal or Face-to-face interviews	- Can establish rapport and motivate respondents. - Can clarify the questions, clear doubts, add new questions. - Can read nonverbal cues. - Can use visual aids to clarify points. - Rich data can be obtained. - CAPI can be used and responses entered in a portable computer	- Takes personal time. - Costs more when a wide geographic region is covered. - Respondents may be concerned about confidentiality of information given. - Interviews need to be trained. - Can introduce interview biases. - Respondents can terminate the interview at anytime
2.	Telephone interviews	- Less costly and speedier than personal interviews - Can reach a wide geographic area. - Greater anonymity than personal interviews. - Can be done using CATI	- Nonverbal cues cannot be read. - Interviews will have to be kept short. - Obsolete telephone numbers could be contacted, and unlisted ones omitted from the sample.
3.	Personally administered questionnaires	- Can establish rapport and motivate respondent. - Doubts can be clarified. - Less expensive when administered to groups of respondents. - Almost 100 percent response rate ensured. - Anonymity of respondent is high.	- Organizations may be reluctant to give up company time for the survey with groups of employees assembled for the purpose
4.	Mail questionnaires	- Anonymity is high. - Wide geographic regions can be reached. - Token gifts can be enclosed to seek compliance. - Respondent can take more time to respond at convenience. - Can be administered electronically, if desired.	- Response rate is almost always low. A 20 percent rate is quite acceptable. - Cannot clarify questions. - Follow-up procedures for non-responses are necessary.
5.	Electronic questionnaires	- Easy to administer, Can reach globally - Very inexpensive. - Fast delivery - Respondents can answer at their convenience like the mail questionnaire	- Computer literacy is a must - Respondents must have access to the facility. - Respondent must be willing to complete the survey.

Note: CAPI- Computer-assisted personal interviewing; CATI- Computer-assisted telephone interviewing.

Source: Sekaran (2006)

Among these modes of collection, mail survey is prevalently adopted by a lot of researchers when they tried to collect considerable data via structured questions from the large scattered sample of population (Mohd Shariff, 2003). The researcher concurs with Cooper and Schindler (2001) who indicate that: "respondents will generally refuse to cooperate with a long and/or complex mail questionnaire unless they perceive a personal

benefit". Hence, the researcher usually does not anticipate obtaining the exact amounts of information and cannot query intensely into the questions (Cooper & Schindler, 2001). According to Lyon, Lumpkin and Dess, (2000) there is also the danger of common-method bias using self-report data, and hence the findings of this research should be regarded as portraying the owner/managers' insights which could give the most accurate evaluation of the situations with a company.

Albeit there are drawbacks in the adoption of questionnaire based research, the benefits due to cost savings, convenience, anonymity, and decreased interview bias appear to prevail over the drawbacks. The main weakness of the mail survey is non-responses. Thus, the combination or following up with telephone call/interview is also useful methods (Hair, Bush & Ortinau, 2003). In this study, the quantitative data will be collected using post-mails and phone interviews.

3.3 Operational Definition and Instrumentation

3.3.1 Operational Definition

For the aim of this study, the researcher defines the operational terms as follows:

a. Entrepreneurship

Entrepreneurship concentrates not only on the entrepreneur, but on the interface of that innovative individual and rewarding or entrepreneurial opportunity (Shane, Venkataraman, 2000, p. 218).

b. Strategic Management

According to Schendel and Hofer, (1978) strategic management is a process that leads the way fundamental task of the company is dealt with, ascertains the nonstop renewal and growth of the company, and, more especially, gives a framework for developing and implementing the strategy that propels the company's activities. The establishment of plans for the efficient management of external opportunities and threats in view of a firm's internal strengths and weaknesses is a key constituent of strategic management. This planning constituent comprises of defining the firm's mission, identifying attainable goals, building up strategies, and putting in place the policy rule (Hitt, Ireland & Hoskisson, 2009).

c. Strategic Entrepreneurship

The Strategic Entrepreneurship (SE) idea can be explained via the evolvement of entrepreneurship as well as strategic management. However, Schindehutte and Morris (2009) indicate entrepreneurship together with strategic management in reality represent exploration and exploitation operations which must be simultaneous and accurately balance as both signify two antagonistic concepts (Sokolova , 2011).

i. Exploration

According to March, (1991) definition of exploration is concentrated on the lookout for novel opportunities, experimenting as well as variation. Within the company, these practices can be attained via entrepreneurial orientation (EO) and entrepreneurial value (EV).

Entrepreneurial Orientation (EO)

The scale from Covin and Slevin (1989) is being employed for the measurement of EO. There are three dimensions in the concept namely innovativeness, proactiveness and risk-taking, with three questions on each dimension.

Entrepreneurial Values (EV)

Entrepreneurial values are an intricate phenomenon consisting of the need for achievement (McClelland, 1961), risk propensity through tolerance for ambiguity (Hisrich, Michael & Dean, 2005; Gibb, 2007), perseverance (Alsaaty, 2007), self efficacy (Rotter, 1966) and persuasiveness (Busenits & Lou, 1996).This study adopts 15 items to measure the entrepreneurial values (EV) depended on the past researches studies by Schumpeter (1934); McClelland (1961); Keeble and Wever (1987); Tambunan (1992, 1994); Nelson and Mwaura (1997).

ii. Exploitation

Exploitation should comprise those features in knowledge creation process employing Nonaka (1994) model of SECI.

Knowledge Creation Process (KCP)

This research employs a five point Likert scale for the measurement of KCP variable via adaptation in Sabherwal and Becerra-Fernandez (2003). Socialization, externalization, combination, and internalization (SECI) are

the four dimensions in KCP (Sabherwal & Becerra-Fernandez, 2003; Nonaka, Toyama & Konno, 2000; Nonaka, Toyama & Nagata, 2000; Nonaka, 1994). That is, four questions/items measure socialization: "cooperative projects across directorates, the use of apprentices and mentors to transfer knowledge, brainstorming retreats or camps, and employee rotation across areas". Five questions/items measure externalization: "a problem-solving system based on a technology like case-based reasoning, groupware and other collaboration learning tools, pointers to expertise, modelling based on analogies and metaphors, and capture and transfer of experts' knowledge". Four questions/items measure combination: "web-based access to data, web pages, databases, and repositories of information, best practices, and lessons learned". Three questions/items measure internalization: "on-the-job training, learning by doing, and learning by observation".

d. Performance of SMEs

Three key sets of indicators of firm performance can be recognized as measurements of efficiency, growth and profitability (Meuleman, Amess, Wright & Scholes, 2009).

This research is derived from the work of Murphy, Trailer and Hill (1996) to measure performance of SMEs variable using three dimensions: "efficiency, growth, and profit". The participants determine the performance of SMEs using five point scales regarding with competitors. Efficiency is measured by three items: "return on investment, return on equity, and return on assets" in the past three years. Growth is measured by three items:

"sale growth, employee growth, and market share growth". Profit is measured by three items: "return on sales, net profit margin, and gross profit margin". And finally one item measure overall performance/success (Murphy et al., 1996).

3.3.2 Instrumentation

Following instrumentation provides an overview and description of each instrument or measure for all the variables in this study.

3.3.2.1 Independent variables (IVs)

a. Entrepreneurial orientation (EO)

Covin and Slevin with their study "Strategic management of small firms in hostile and benign environment" (1989) develop a scale which later becomes an instrument well established throughout the empirical researches on entrepreneurship as well as entrepreneurial orientation (EO). Within their research they develop the instrument to measure "strategic posture" that has tendency either more for entrepreneurial or conservative relies on the company dependents to innovation, proactiveness and risk-taking.

In this scale, some were items derived from adaptation in other studies (Miller, Friesen, 1982; Khandwalla, 1976/77), others having their origin from Covin and Slevin (1989). Factor analyses were carried out and have confirmed the items' validity to represent the scale. Subsequently this scale from Covin and Slevin (1989) is widely adopted in many studies.

In the survey of empirical researches on entrepreneurial orientation, Rauch et al., (2009) realised many researchers have employed dissimilar variance to this scales with three key varying features: "different number of dimensions, e.g. "futurity and competitive aggressiveness" dimensions from Venkatraman (1989); different number of scale items and conversion of original statements to Likert scale". Nevertheless, according to Rauch et al., (2009) majority of the empirical researches still employ Covin and Slevin (1989) original scale thereby showing it is widely accepted to be the main instrument to measure EO.

Within this research, measurement of EO is done through the adaptation of items from Covin and Slevin (1989) scale: three questions for each of the three dimensions of EO – "innovativeness, proactiveness and risk-taking".

According to Covin, Slevin, (1989); Rauch et al., (2009) among the scholars there exists different opinions whether to treat the concept of EO as unidimensional by combining the three dimensions into one scale or multidimensional which consists of three separate dimensions that require separate analysis. For this research, the researcher adopts the former approach and analyse its impact on SMEs performance. Later in Chapter 4, the researcher is to recover the actual dimensionality of EO in this research through the findings of the factor analysis.

Measurement of innovativeness is through the answers for the below three items/questions using five-point Likert scale:

1. "In general, the top managers of my firm favour a strong emphasis on R&D, technological leadership and innovations vs. a strong emphasis on the marketing of tried and true products or services"

2. "How many new lines of products and services has your firm marked in the past 5 years?"

3. "How many changes in products and services has your firm made in the past 5 years?"

Proactiveness refers to the company stance in competition, its readiness and aspiration to fight in the intense competition. Its associated measurement is done through the three items/questions employed in the scale by Covin and Slevin (1989). Participants assess whether to agree with the contradict statements using the five-point scale; bigger score correspond to greater proactiveness.

1. "In dealing with its competitors my firm typically responds to actions which competitors initiate vs. typically initiates actions which competitors then respond to"

2. "In dealing with its competitors my firm is very seldom the first business to introduce new product/services, administrative techniques, operating techniques, etc. vs. is very often the first business to introduce new product/services, administrative techniques, operating techniques, etc"

3. "In dealing with its competitors my firm typically seeks to avoid competitive preferring 'live and let live' posture vs. typically adopts a very competitive 'undoclashes, the-competitors' posture"

The measurement of risk-taking is to check whether the company is ready to engage risky projects, and is done through the three items/questions employed in the scale by Covin and Slevin (1989). The highest five points associate with the highest risk-taking behaviour:

1. "In general, the top managers of my firm have a strong proclivity for low-risk projects (with normal and certain rates of return) vs. a strong proclivity for high-risk projects (with chance of very high return)"

2. "In general, the top managers of my firm believe that owing to the nature of the environment, it is best to explore it gradually via bold, timid, incremental behaviour vs. owing to the nature of the environment, wide-ranging acts are necessary to achieve the firm's objectives"

3. "When confronted with decision-making situations involving uncertainty, my firm typically adopts a cautious, 'wait-and-see' posture in order to minimize probability of making costly decisions vs. typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities"

Prior joining the items of the three dimensions into a single EO scale, test on reliability is to be carried out. Accordingly, Cronbach's alpha is measured to demonstrate the internal consistency of the scale. The mean and standard deviation of the scale are calculated.

Again subsequently in Chapter 4, the researcher will recover the actual dimensionality of EO through the findings of FA in this study.

b. Entrepreneurial values (EV)

According to Ireland et al., (2003) entrepreneurial culture or value with effectiveness encourages one to be innovative, creative, willing to take risk, and continuously changing at the same time tolerance with no success. In this study, the entrepreneurial values (EV) variable is gauged by 15 items with 7 sub-dimensions: belief of employment creation, belief of success, need of achievement, belief of hardworking, belief of creativity, belief on locus of control, and belief of learning from others. These items are hinged on the past researches done by Schumpeter (1934); McClelland (1961); Keeble and Wever (1987); Tambunan (1992, 1994); Nelson and Mwaura (1997).

In this study the dimensions of EV (with 7 sub-dimensions) and their impact on performance of SMEs are joined into a single scale first. Again later, factor Analysis (FA) is to be carried out on this variable to reveal the actual dimensionality. The Cronbach's alpha, mean and standard deviation of the variable are to be calculated.

c. Knowledge creation process (KCP)

This research is using five point scales per adaptation via Sabherwal and Becerra-Fernandez (2003) to do measurement for the variable KCP. KCP has four dimensions which are "socialization, externalization, combination, and internalization" (SECI) (Sabherwal & Becerra-Fernandez, 2003; Nonaka, Toyama & Nagata, 2000; Nonaka, Toyama & Konno, 2000; Nonaka, 1994). Measurement of socialization via four

questions/items: "cooperative projects across directorates, the use of apprentices and mentors to transfer knowledge, brainstorming retreats or camps, and employee rotation across areas". Measurement of externalization via five questions/items: "a problem-solving system based on a technology like case-based reasoning, groupware and other collaboration learning tools, pointers to expertise, modelling based on analogies and metaphors, and capture and transfer of experts' knowledge". Measurement of combination via four questions/items: "web-based access to data, web pages, databases, and repositories of information, best practices, and lessons learned". Measurement of internalization via three questions/items: "on-the-job training, learning by doing, and learning by observation".

In this study the dimensions of KCP (with four dimensions) and their impact on performance of SMEs are joined into a single scale first. Again later, factor Analysis (FA) will be carried out on this variable to reveal the actual dimensionality. The mean, standard deviation and Cronbach's alpha of the KCP scale are to be calculated.

3.3.2.2 Dependent variable (DV): Firm Performance

Previous study has used various financial measures such as revenue, cash flow, return on assets, return on equity, and so on to gauge firm performance (Haber, Reichel, 2005). These objective financial measures are needed but not adequate to apprehend comprehensive firm performance (Aggarwal & Gupta, 2006; Clark, 1999; Murphy, Trailer, & Hill, 1996). As such, some researchers have recommended the mixture of financial and non-financial measures to deliver more complete assessment of firm performance (Clark, 1999; Haber & Reichel, 2005; Venkatraman & Ramanujam, 1986).

Subjective non-financial measures comprise of indicators like customer satisfaction, perceived sale growth, perceived market share, brand equity and loyalty (Haber & Reichel, 2005; Clark, 1999). According to Aggarwal and Gupta, (2006) on top of the measurements of financial and non-financial aspects, the internal as well as external measures are the other ways to focus. Internal measures relate to those to do with stakeholders within the company while external measures deal with those outside the company such as suppliers, customers, competitors, as well as other market related indications (Aggarwal & Gupta, 2006; Haber & Reichel, 2005). Performance also needs to be accessed via the reflections in input and output views. Input measures deal with undertakings which are helpful to attain final outcomes while output measures mirror the company's main objectives as well as emphasizing profits plus end-results (Aggarwal & Gupta, 2006; Clark, 1999). Within entrepreneurship studies, performance measurement faces inadequacy in proper directions due to the obscurity to define performance (Haber & Reichel, 2005; Brush & Vanderwerf, 1992).

According to Delmar, Davidsson and Gartner, (2003) firm performance is a multidimensional construct. Growth is one of the key dimensions for firm performance for SMEs (Delmar, 1997). Murphy et al. (1996) inspected fifty one entrepreneurship papers with performance as dependent variable, and established majority are taken dimensions of firm performance are concerned with "efficiency, growth, and profit". Heeding this recommendations by Murphy et al. (1996) and Meuleman et al., (2009), this research employs "efficiency, growth, and profit" as the measurement of the performance of SMEs. That is, efficiency is measured by three items: "return on investment, return on

equity, and return on assets" in the past three years. Growth is measured by three items: "sale growth, employee growth, and market share growth". Profit is measured by three items: "return on sales, net profit margin, and gross profit margin". And one final item measures the overall performance/success (Murphy et al., 1996).

3.3.2.3 Summary table of instrumentation

Below Table 3.2 shows the comprehensive summary table of the instrumentation used in this study.

Table 3.2
Summary table of instrumentation

Variable type	Operational definitions	Items	Sources
Independent Variable (IV): Entrepreneurial orientation (EO)	According to Lumpkin and Dess, (1996) entrepreneurial orientation is regarded as the company's strategic orientation, obtaining certain entrepreneurial ways in decision-making approaches, procedures, and processes. Covin and Slevin (1989) regard that the important dimensions in EO to be innovativeness, proactiveness and risk-taking. Innovativeness is defined as "any newly developed idea, practice or material artifact that is perceived to be new by the early units of adoption within the relevant environment"	Innovatiness dimension: 1. "In general, the top managers of my firm favour a strong emphasis on R&D, technological leadership and innovations vs. a strong emphasis on the marketing of tried and true products or services" 2. " How many new lines of products and services has your firm marked in the past 5 years?" 3. " How many changes in products and services has your firm made in the past 5 years?" Proactiveness dimension: 1. " In dealing with its competitors my firm typically responds to actions which competitors initiate vs. typically initiates actions which	Total 9 items from 3 items each of the sub-dimensions (Covin & Slevin, 1989).

	(Biemans, 1992). Proactiveness is defined as the company's tendency to take the initiative to compete aggressively with other firms (Covin & Slevin, 1989). Risk-taking is defined as the firm willingness in engaging projects with risk as well as inclination to invest substantial resources on the projects which are not certain on their results (Miller & Friesen, 1982).	competitors then respond to" 2. " In dealing with its competitors my firm is very seldom the first business to introduce new product/services, administrative techniques, operating techniques, etc. vs. is very often the first business to introduce new product/services, administrative techniques, operating techniques, etc" 3. " In dealing with its competitors my firm typically seeks to avoid competitive preferring 'live and let live' posture vs. typically adopts a very competitive 'undoclashes, the-competitors' posture" Risk-taking dimension: 1. " In general, the top managers of my firm have a strong proclivity for low-risk projects (with normal and certain rates of return) vs. a strong proclivity for high-risk projects (with chance of very high return)" 2. " In general, the top managers of my firm believe that owing to the nature of the environment, it is best to explore it gradually via bold, timid, incremental behaviour vs. owing to the nature of the environment, wide-ranging acts are necessary to achieve the firm's objectives" 3. " When confronted with decision-making situations involving uncertainty, my firm typically adopts a cautious, 'wait-and-see' posture in order	

		to minimize probability of making costly decisions vs. typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities"	
Independent Variable (IV): Entrepreneurial values (EV)	Entrepreneurial values are an intricate phenomenon consisting of the need for achievement (McClelland, 1961), risk propensity through tolerance for ambiguity (Hisrich, Michael & Dean, 2005; Gibb, 2007), perseverance (Alsaaty, 2007), self efficacy (Rotter, 1966) and persuasiveness (Busenits & Lou, 1996).	1. "I started up this business because of job creation." 2. "I started up this business because of money creation." 3. "I started up this business because I believe that I can do it as others." 4. "I conduct this business because I want to achieve success in my life." 5. "I believe that the success of this business start up comes from hard work." 6. "I believe that my creativity enable me to manage the start up business ahead." 7. "I fear of losing if I push the business ahead." 8. "I do not want to expand my business because of my exhaustion." 9. "I believe on running my own business rather than depending on destiny." 10."I can do this kind of business because I have skills/knowledge/experience." 11. "I fear to expand the business because my skills are not strong enough."	Total 15 items with 7 sub-dimensions: belief of employment creation, belief of success, need of achievement, belief of hardworking, belief of creativity, belief on locus of control, and belief of learning from others (Schumpeter, 1934; McClelland, 1961; Keeble & Wever 1987; Tambunan, 1992, 1994; Nelson & Mwaura, 1997).

		12. "I can run the business because I have learned through family experience in business." 13. "I value on learning to improve my business." 14. "I have a plan to run my business well." 15. "I spend my spare times in business rather than go for a holiday."	
Independent Variable (IV): Knowledge Creation Process (KCP)	According to Nonaka, (1994); Nonaka and Konno, (1998) with regard to knowledge creation theory, the creation of knowledge is via "a spiral process of socialization, externalization, combination, and internalization (SECI)".	1. "My firm usually adopts cooperative projects across departments/divisions." 2. "My firm usually uses apprentice and mentors to transfer knowledge." 3. "My firm usually adopts brainstorming retreats or camps." 4. "My firm usually adopts employee rotation across areas." 5. "My firm usually adopts a problem-solving system based on a technology like case-based reasoning (CBR)." 6. "My firm usually adopts groupware and other team collaboration tools." 7. "My firm usually adopts pointers to expertise." 8. "During meaningful dialogue sessions, my firm usually adopts modelling based on analogies and metaphors." 9. "My firm usually captures and transfers experts'	Total 16 items from adaptation via Sabherwal and Becerra-Fernandez (2003) to do measurement for the variable KCP. KCP has four dimensions which are "socialization, externalization, combination, and internalization" (SECI) (Sabherwal & Becerra-Fernandez, 2003; Nonaka, Toyama & Nagata, 2000; Nonaka, Toyama & Konno, 2000; Nonaka, 1994).

		knowledge." 10. "My firm usually adopts web-based access to data." 11. "My firm usually uses web pages (intranet and Internet)." 12. "My firm usually uses databases." 13. "My firm usually adopts repositories of information, best practices, and lessons learned." 14. My firm usually adopts on-the-job training. 15. "My firm usually adopts learning by doing." 16. "My firm usually adopts learning by observation."	
Dependent Variable (DV): Firm Performance (FP)	Murphy et al. (1996) inspected fifty one entrepreneurship papers with performance as dependent variable, and established majority are taken dimensions of firm performance are concerned with "efficiency, growth, and profit".	In the past three years… 1. My firm is usually satisfied with return on investment (ROI). 2. My firm is usually satisfied with return on equity (ROE). 3. My firm is usually satisfied with return on assets (ROA). 4. My firm is usually satisfied with sales growth. 5. My firm is usually satisfied with employee growth. 6. My firm is usually satisfied with market share growth. 7. My firm is usually satisfied with return on sales (ROS). 8. My firm is usually satisfied	10 items from the work of Murphy, Trailer and Hill (1996) to measure performance of SMEs variable using three dimensions: "efficiency, growth, and profit".

		with net profit margin. 9. My firm is usually satisfied with gross profit margin. 10. My firm is usually satisfied with overall performance/success.	

3.3.3 Questionnaire Design

In this survey research, the questionnaire provides the main instrument to collect data and was designed based on its research questions and objectives (Terpstra & Olson, 1993; Saunder et. al., 2012). In the questionnaire design, the researcher has to fulfill basic requirements such as the correct wording of the questions; the categorization of the variables into obvious sections and the acceptable layout for the self-completed questionnaire (Sekaran, 2006; Saunder et. al., 2012, p.441-445). The questionnaire survey was divided into two parts. Part One contained the respondents' organizational background, namely industry sector, number of employee, amount of capital, annual turnover, firm age and stage of business. It is noticeable that, to assure anonymity, respondents are not asked to provide their name, company name, address and personal particulars. Part Two measured the factors that influence the growth performance of SMEs, namely EO, EV and KCP as well as the Firm performance questionnaire. Apart from the basic approaches stated above, the researcher also emphasizes the following considerations in Part Two.

a. Five-point Likert scale

This study uses five-point Likert scale which is the same as the existing scales from the academic literature. According to Schrauf and Navarro (2005), this is the

most appropriate approach because the scale evaluates what it is intended for; proven and verified in previous empirical researches, and the target respondents are alike (Saunder, Lewis & Thornhill, 2012, p.439).

b. Reverse coding

According to Sauro and Lewis (2011, May), for reverse coding or alternating-item wording, there are two key purposes. One is to reduce acquiescent-bias when respondents broadly auto-piloting and concur with all items which end-up all answers with 4's and 5's. The other is to reduce extreme-response-bias where respondents give all the same scale readings like all 5's or all 1's. This later bias is similar to the former bias with an exception where respondents generally choose the extreme score for most or all questions. Thus, by having negative questions within each group of items, respondents are obliged to ponder the question carefully and deliver correct responses with minimised biases (Sauro & Lewis, 2011). In this study, item (marked with *) number 4 for each EO and EV questionnaires, as well as number 9 of KCP are reverse-coded.

c. Translation

Previous studies on Malaysian business reveal that particular areas of business are dominated by particular race group in Malaysia. For instance, Gomez, Loh, and Lee (2004) found that ethnic Chinese possessed wholesales trading with 82 percent; retail trading with 58 percent; construction category equity with 50 percent and manufacturing category with about 40 percent. Omar (2006) in his report, states that majority of the SMEs in Malaysia are belonged to the ethnic Chinese. It is also known that the command of English for some of the ethnic

Chinese SME owners is rather low as compared to the Malay and Indian SME owners who generally have no problem to understand questionnaire in English. Thus in this study, to address the issue of this particular group of Chinese SMEs' owners for low literacy in English, there is a need of additional Chinese translation to complement the understanding of the questionnaires.

The researcher has written and done the translation of the questionnaires. For the back to back translation, it was carried out by one experienced Malaysian Chinese lecturer (native speaker of Chinese language) at the University of Malaya, Malaysia, who holds a Master Degree of English Language. These two sources of questionnaires were then compared to expose any discrepancy and subsequently rectified (Brislin, 1970; Usunier, 1998; Saunder et. al., 2012, p.442). The ultimate version of questionnaires was then finalised (Appendix A).

d. Explanation of some technical related terms

In order to make sure all respondents understand in the same way and have the necessary knowledge to answer (Saunder et. al., 2012, p. 441), those technical related terms used in KCP questionnaires were clarified with further explanations and examples.

3.4 Sampling Procedure

The population of this research is hinged on the SME Business Directory which is obtainable at http://www.smeinfo.com.my/index.php/en/sme-business-directory. It is familiar to observe a lot of previous studies on SMEs in Malaysia (e.g. Deros, Yusof & Salleh, 2006; Alam & Ahsan, 2007; Che Rose, Kumar & Lim, 2006; Lai, 2006; Sumaiyah

& Mahmood, 2011; June & Mahmood, 2011; Singh & Mahmood, 2013; Aziz & Mahmood, 2014) centred on either the manufacturing, service sector or the whole sectors of SMEs. This is due to the fact that albeit there are a lot of SMEs set up in each industry type, they are majority very small in size such that their numbers may not impact the comparative significance of their kind of business (Hashim, 2000).

In this research, the sampling frame signifies a listing of 86 percent of all SMEs and is extremely modelling the overall SME industry. Owner/managers of the SMEs are provided with the questionnaire surveys for them to answer. They are chosen since they are the most insightful of the overall operational of the business. It has been illustrated in a lot of researches that business owners or high-level managers are chiefly the decision makers mapping the strategic orientation of the company (Covin & Slevin, 1989; Cunningham & Lischeron, 1991). A review of an industry's leader could give significant information about the industry's fundamental business philosophy as they classically direct the company's general business philosophy (Chaganti & Sambharya, 1987; Miles & Arnold, 1991; Zelditch, 1962). As such, the unit of analysis for this study refers to the company level since the respondents who are owner/managers represent the SME firm.

The whole SME population listed in Malaysia SMI Directory (http://www.smeinfo.com.my/index.php/en/sme-business-directory) is 17,016 which is hinged on the definition set by the central bank of Malaysia (Bank Negara Malaysia, 2005). For this research, four main sectors were chosen, namely Manufacturing (include agro-based), Manufacturing Related Services, Services (including ICT) and Construction which make up a total actual population of 14,609 (86 percent). This research was

employing random sample of Malaysian SMEs. According to Creswell, (2003) in random sampling, each individual in the population has the same chances of being picked. Leedy and Ormrod (2005) also emphasized that when a random sample is chosen, the author can take for granted that the features of the sample are closed to the features of the total population. McMillan and Schumacher (2001) declared that the sample size should be adequately large to project the features of the population acceptably to deliver sensible outcomes. The proposal by Saunder, Lewis and Thornhill (2012) was adopted for sample size decisions. Thus, from Table 3.3 below (taken from Saunders et al. 2012, p. 266), sample size is (at-least) 370 with 5 percent margin of error.

Table 3.3
Sample sizes for different sizes of population at a 95 per cent confidence level (assuming data are collected from all cases in the sample)

	Margin of error			
Population	**5 %**	**3 %**	**2 %**	**1%**
50	44	48	49	50
100	79	91	96	99
150	108	132	141	148
200	132	168	185	196
250	151	203	226	244
300	168	234	267	291
400	196	291	343	384
500	217	340	414	475
750	254	440	571	696
1 000	278	516	706	906
2 000	322	696	1091	1655
5 000	357	879	1622	3288
10 000	**370**	964	1936	4899
100 000	383	1056	2345	8762
1 000 000	384	1066	2395	9513
10 000 000	384	1067	2400	9595

Source: Saunder, Lewis and Thornhill (2012), p.266.

With estimated 20 percent (Sumaiyah & Mahmood, 2011; June & Mahmood, 2011; June, Kheng & Mahmood, 2013) response rate, the number of questionnaires to be sent is five folds or 1850 (from 370 X 5).

This study employs simple random sampling technique as the probability of selecting any element within the population is similar (Wolverton, 2009). Furthermore, simple random sampling is the preferred choice because in the case of sampling interval being linked to periodic patterns of the sampling frame items, systematic random sampling will increase the variability issue (Saunders et al., 2012, p. 271).

Since the sample size is rather large (1,850) from a population of 14,609 and to avoid tediousness, online random number generator (http://www.random.org/integers/) is employed. Simple random sampling technique can be done using replacement or without-replacement. Using replacement, the probability of selecting any element is 1/N with N as the size of population. On the other hand, using without- replacement where one purposely shuns away from selecting any element twice, the probability raises as elements are chosen. In this study, as per large population (14,609) situation, the sampling technique is per usual carried out without-replacement. Moreover, in this case of sampling out of a huge population (14,609), without-replacement technique is similar to that of replacement type, due to the chances to select the same element more than once is not high (Wolverton, 2009; Saunders et al. 2012, p. 273).

Simple random sampling is therefore regarded as extremely representative since each element within a population possesses same probability to be chosen. However, there is

still a possibility of choosing a non-representative sample randomly. This is regarded as the sampling error. Total elimination of this type of error is not possible but it is very much reducible via selecting from bigger samples (Wolverton, 2009) such as more than a few hundred cases (Saunders et al. 2012, p. 274).

3.5 Reliability and validity

3.5.1 Reliability

Reliability which is sometime considered as internal consistency also regarded as the degree to which the measurement instrument accurately and repetitively gauges the proposed construct (Churchill, 1979; Peter, 1979). Reliability measure is talking about a certain method, tested continually to the similar object, will produce the same outcome every time (Babbie, 1998). The reliability of a measure is earned by examination for both consistency and stability (Cavana, Delahaye & Sekaran, 2001). The measure is regarded reliable if the outcomes of a measure can be repeated.

The reliability is also the degree that a measure is without error (Peter, 1979). Reliability measures are adopted for all scales used. According to Cronbach, (1951) alpha coefficient is one of the tests of reliability as it computes the amount of the scale's total variance that is accountable to a shared source; most probably the actual score of the latent variable inherent the item. Cronbach's alpha is a sufficient measure of reliability (Cavana, Delahaye & Sekaran, 2001). Nunnally (1978) suggested .6 is still tolerable for early stage of research while Cortina (1993) alleged that the measure is item specific variance when the score is larger than .7. The Cronbach alpha coefficient is employed extensively in the literature to assess the reliability of strategy measures (Venkatraman & Grant, 1986;

Venkatraman, 1989). In this research, a pilot test employing Cronbach's alpha is carried out on a sample of respondents with an aim to reassess and to measure reliability of the questionnaire. The Cronbach's alpha is acquired via SPSS computer analysis.

3.5.2 Validity

Validity is a word relating a measure that precisely reveals the concept it is intended to measure. There are a number of validities to look at.

First, face validity is designated by whether the items described on the questionnaire are obvious and comprehensible to the subjects. Second, content validity is pertaining to the degree a measure encompasses the variety of meanings contained inside a concept. These are measured by providing the questionnaire to a sample of respondents (experts) to judge their response and feed-back to the items.

Third, construct validity is the how much a measure associate to other variables as anticipated inside a system of theoretical associations. Factor Analysis (FA) which is the best way to analyse internal structure of a group of indicators enlightening unidimensional or multidimensional is adopted in this research. Prior FA, the researcher verifies for Bartletts' test of Sphericity and Kaiser-Meyer-Olkin (KMO) which are elucidated as follow.

The scholar's a priori hypothesis that each factor (the number and labels of which may be explicitly stated a priori) was connected with a clearly stated subset of indicator variables (Sekaran, 2006). A minimal prerequisite of a factor analysis is contemplated earlier and the number of factors in the model is postulated for anticipations about which variables

will load on which factors (Zikmund, 2003). The scholar endeavours to decide, for example, if measures constructed to signify a latent variable actually fit in as one.

Factor analysis is employed to expose the latent structure (dimensions) of a group of research variables. It trims down element space from a bigger number of variables to a lesser number of factors and therefore is a "non-dependent" method (that is, it does not presume a dependent variable as explicitly stated) (Cohen, 1983). Kaiser-Meyer-Olkin (KMO) value elucidated the validation of a scale or index by indicating that its elements load on the same factor, and to discard recommended scale items which cross-load on more than one factor. Computed by the KMO values, sampling adequacy forecasts if data are prone to factor well, depended on correlation and partial correlation (Babbie, 2004; Cavana, et al., 2001; Cohen, 1988; Zikmund, 2003).

Rotation is employed to interpret the factors in much improved clarity. Through rotation, each variable loads heavily on one particular extracted factor and weakly on the rest of other factors. Varimax, quartimax, and equamax rotations are orthogonal whilst direct oblimin, quartimin, and promax rotations are oblique. Factors derived from orthogonal rotations tend to be independent or uncorrelated whereas oblique rotations produce correlatable factors. Rotations usually favour the orthogonal as "There is no denying that orthogonal rotations have the advantage of simplicity" (Pedhazur & Schmelkin, 1991, p. 615) as well as the repeatability in the outcome of orthogonal rotations. This is tally with the rotation's primary objective of having parsimonious outcomes as well as replicability to the later studies. Albeit orthogonal rotations may not the best-fit in representation of reality, but its advantages are much more than its disadvantages. Furthermore, Hetzel (in

press, 1996) indicates ". . . when simple structure is clear, standard rotation procedures can be expected to produce similar interpretations." Among Orthogonal rotations, varimax rotation main task is to clean up those factors. According to Stevens (1996), it creates factors which highly correlate to single variables group whilst weakly or not correlate to other variables group. Thus, as compared to quartimax or equamax, varimax rotation interprets or separate factors with much more clarity (Stevens, 1996; Hair, Black, Babin & Anderson, 2010, p.115). As such for each factor analysis conducts in this research, the method of varimax solution, which is the most common rotation option (Cavana, et al., 2001; Cohen, 1988; Zikmund, 2003), was employed to recognize each variable with a single factor.

3.6 Data Collection Procedure

To conduct a proper research design, data collection procedure is considered to be very crucial. This is because data collection procedures reply to the questions of how, who, and when on this research work.

3.6.1 Pre-Test and Pilot Test

A pre-test is carried out by collecting comments/advice from experts (two experienced professors and one SME company owner) in this field on the quality of the instruments.

The aims of the pilot study are to assess the reaction of the participants to the length, format and content of the instruments, to request the potential respondents to give remark critically on the clarity of the scales, and to enhance the reliability of the instruments. To make certain the reliability for the instruments, a pilot test was carried out with 40

owner/managers of the SMEs in Malaysia. The respondents were required to complete the questionnaire. The respondents were also requested to comment critically on its wordings, clarity, bias, and relevancy. The choice of participants was those SME owners who are situated in whole Malaysia. Some of the participants were sent with the questionnaires, while others were self-administered during the face-to-face interviews. The key benefit of face-to-face interviews is that the researcher is capable of adjusting the questions as needed, elucidate doubts and make certain that the respondents correctly comprehend the questions (Sekaran, 2006). Furthermore the researcher is capable of repeat and rephrases the questions. The reliability of the survey instruments is analysed based on Cronbach's alpha coefficients. The outcomes of the pilot test are to expose that if the coefficients are larger than 0.7, which means a satisfactory reliability (Nunnally, 1978; Cortina, 1993).

3.6.2 Data Collection Process

As mentioned earlier, Saunders (2007) suggests that the supposed samples for this research should be as a minimum 370 samples based on the population of 17,016 SMEs in Malaysia. The survey methods employing postal and phone call interview were adopted to collect data. Via postal services, 1850 questionnaires were sent to owner/managers of the SMEs all over Malaysia.

3.7 Data Analysis

There are quite a few statistical techniques that can be conducted to infer correctly with regards to the growth performance of SMEs. In this research, the data analysis employs descriptive statistics and inferential statistics. Descriptive statistics like frequency and percentage are adopted to gauge the percentage of returned questionnaire and also apply

to depict the respondents' profile such as the profile of SME companies, type of business, size of business, number of employee, etc (Babbie, 2004; Cavana, et al., 2001; Cohen, 1988; Zikmund, 2003).

The statistical analysis methods for this research are employed from many researchers. For instance, majority of researchers suggested that, prior the data analysis, measuring the reliability of internal consistency association among each items in the scales is imperative (Kumar, 1996; Hair, Bush & Ortinau, 2003). This verification permits the author to decide which scale items in his questionnaires are linked to each other in terms of the internal consistency and which are the questionable items that should be left out from the scale (SPSS Inc., 1999).

Correlation and multiple regressions are employed for inferential statistics. The Pearson correlation is applied to compute the significance of linear bivariate between the independent and dependent variables thereby attaining the objective of this research (Babbie, 2004; Cavana, et al., 2001; Cohen, 1988; and Zikmund, 2003). The multiple regressions are adopted to decide the relationship between independent and dependent variables, the strength, degree and direction of the relationship (Hair, Anderson, Tatham & Black, 1998). In this research, data is analyzed using SPSS version 19.0.

3.7.1 Data Screening/cleaning

To prevent issue of garbage-in-garbage-out (GIGO) in the analysis, few prerequisite checks or tests are to be conducted before the actual data analysis, as following:

(a) check if data have been entered correctly, such as out-of-range values.

(b) check for missing values, and deciding how to deal with the missing values.

(c) check for outliers, and deciding how to deal with outliers.

Outliers are data that look very unique or 'far' from other observations and perceive as extreme value for a single variable (univariate) or combination of variables (multivariate) (Ghozali, 2005). The revelation of univariate outliers can be done by determining the limit value which is categorized as an outlier data. This is done by using SPSS 19.0 Analyze --> Descriptive Statistics --> Explore, the test results shown in the boxplots reveal the situation of the outlier either mild(with 'dot') or serious (with 'star').

3.7.2 Descriptive Analysis Test

The researcher established that majority of the past studies on SMEs growth performance; for instance, Marshall et al. (1995); Terpstra and Olson (1993); Hood and Young (1997); Siu (1992); Nelson and Mwaura (1997); Teo and Cheong (1994); employed the frequency count and percentage to explain the characteristics of their research data.

The researcher adopts the frequency count and percentage to depict the nominal and ratio scale data characteristics in section 1 of the questionnaire instrument. In addition, According to Richardson et al., (2005) at the initial stage of the data analysis it is excellent for a researcher to perform a descriptive analysis. According to Sekaran, (2006); Dielman, (2005) the instrument employed can be frequency, percentage, mean, maximum, minimum, standard deviation, and variance. In reality a lot of scholars in the field of SMEs for example Levy (1993) adopted mean as the instrument to gauge the key restraints to the development of SMEs in Sri Lanka and Tanzania.

Percentages are employed to study the SMEs growth restraints in Malaysia (Shahadan, Berma, Zin & Mahbar, 1998); while means are employed to study the factors that linked to the growth of SMEs in Singapore (Tan & Tay, 1995). As such, the statistical tool of maximum, minimum, mean, standard deviation, and variance are suitable to gauge the central tendency and dispersion of interval scale data (Coakes & Steed, 2003; Sekaran, 2006).

3.7.3 Assumptions of multiple regression

Prior performing the multiple regression analysis, there are four assumptions namely normality, linearity, homoscedasticity and independence of residuals that have to be fulfilled first (Tabachnick & Fidell, 2007).

a. Normality Test

This research knows the normality test as the pre-requisite measurement for the data and efforts to employ the inferential statistical techniques or multivariate analysis. Normality test is conducted to check whether the sampled data is normally distributed or not. It is pointed out that the normality of data is the most basic assumption in the inferential statistical techniques (Norusis, 2000; Coakes & Steed, 2003; Kirkpatrick & Feeney 2005; Carver & Nash, 2005). If the data have deviated much from the normal distribution, the data were not adequate for statistical analysis (Hair, Anderson, Tatham & Black, 1995).

There are various statistical graphs employed to investigate the normality assumption. For instance, Skewness, Kurtosis, Histogram and Stem-and-leaf plot (Coakes, 2005). Among these, the easiest graph techniques are the Histogram and Stem-and-leaf plot (Coakes &

Steed, 2003; Kirkpatrick & Feeney, 2005) and for the statistical test is the Skewness and Kurtosis (Coakes, 2005; Carver & Nash, 2005). The rule of thumb stated that if the value of skewness and kurtosis were zero, then the distribution of the observed data will be considered precisely normal. According to Coakes, (2005); Carver and Nash, (2005) the positive skewness is the positive skew, the negative skewness is the negative skew, the positive kurtosis is peak, and the negative kurtosis is the flat. This research is to employ the normal probability plot as proposed by Coakes and Steed (2003). A (or near) bell-shape curve is to be checked. Also Skewness and Kurtosis assessment are to be carried out to ascertain the normality of the data distribution (Cohen, Cohen, 1983).

b. Linearity Test

Regression analysis is a linear process. Given the fact that there exist the nonlinear relationships, conventional regression analysis will misjudge the relationship (Cohen, Cohen, 1983). Explicitly, R^2 underrates variance-explained on the whole whilst betas underrate variables' significance engaging into nonlinearity. Considerable infringement in linearity therefore indicates regression findings to be approximately useless. For regression models to be adopted, the fulfilment of linearity assumption is a critical step in research (Hair et, al., 1998).

Nonlinearity will be exhibited in straightforward residual plots which show standardized residuals versus standardized estimates of Y or DV. The current research is using SPSS to determine the ZRESID vs. ZPRED. There are some researchers who choose to plot on the Y axis the studentized-residuals versus the X axis the unstandardized predicted values.

With no nonlinearity or heteroscedasticity, the plot should exhibit a random pattern (Davidsson, 2004; Kinnear, 2004; Zikmund, 2003).

According to Sekaran, (2006) a rule of thumb in regression, in a situation where dependent's standard deviation greater than residuals' standard deviation, nonlinearity usually considered a non-issue.

c. Homoscedasticity

Coakes, Steed and Dzidic, (2006) treat homoscedasticity as "the variability in scores for one variable is roughly the same at all values of the other variables, in other words it concerns on how the scores cluster uniformly about the regression line". One technique to gauge homoscedasticity could be through the option of weighted least squares regression (Hair et al., 1998). As a result, in computation of b coefficients, occurrences with lesser residuals are weighted higher. Dependent's reciprocal transformations, log and square root might also decrease or remove inadequacy in homoscedasticity (Cohen & Cohen, 1983).

The current research checks among variables employing spearman's correlation to make certain that the residuals is scattered randomly all over the range of the estimated dependent variable (Cohen & Cohen, 1983). In other words, the residual-error variance has to be steady in all IVs' values (Kinnear, 2004; Zikmund, 2003). Thus, to test the residuals against the predicted values, scatter plots can be employed (Hair, Black, Babin, Anderson & Tatham, 2006) in this research.

d. Independence of residuals

According to Cohen and Patricia, (1983) the Durbin-Watson coefficient, (d) can be carried out to gauge the autocorrelation of the model. The rule of thumb classified that the value of d should ranges from 0 to 4. Values near 0 designate acute positive autocorrelation; near 4 designates acute negative autocorrelation; and near 2 designates no serial autocorrelation. As a rule of thumb, d should be in range of 1.5 to 2.5 to designate independence of residuals (Cohen, Patricia, 1983).

Independence of residual is another assumption for multiple regressions that ensure that a regression model is free or independent of error (Hair et al., 2006). "Durbin Watson test" is a statistical test that can be used to check whether the independence of residual is fulfilled (Coakes et al., 2006). Again to fulfil this multiple regression assumption, the Durbin Watson reading should be between the ranges of 1.5 to 2.5.

3.7.4 Correlation analysis

Correlation analysis has been employed on a variety of researches concerning to entrepreneurial orientation (Becherer & Maurer, 1997; Miller & Friesen, 1982; Naman & Slevin, 1993; Kreiser, Marino & Weaver, 2002) whereby it is to gauge the co-variance between the sub-dimensions in the framework. On the other hand, it is recognized that if the independent and dependent variables were greatly correlated it would be helpful to construct models (Richardson, Guru, Yu, Wei & Pointon, 2005). Some employed correlation analysis to look for factors that have relationship with the growth of medium-sized firms in Kenya (Nelson & Mwaura, 1997), while others employed correlation to find out a variety of factors that influence the relationship with small manufacturing companies's growth in Japan (Wijewardena & Cooray, 1996).

A correlation analysis is to be conducted among the variables developed in each hypothesis to confirm the extent and significance of any relationships before conducting regression analysis on the data. The Pearson product moment correlation coefficient is to be employed in deciding the scale and the direction of the relationships among variables. Pearson's correlation coefficients set up the relationships among the variables (Babbie, 2004; Cavana, et al., 2001; Cohen, 1988; Zikmund, 2003). Nevertheless, as a rule of thumb, according to Cohen and Cohen, (1998) multi-collinearity will be an issue if a correlation is exceeding .90 or some are exceeding .70 in the correlation matrix of the independent variables.

3.7.5 Multi-collinearity Analysis

The intercorrelation of independent variables refers to multi-collinearity. According to Cohen and Patricia, (1983) R^2 close to one infringe supposition for non-ideal colinearity, whilst large R^2 add to the beta coefficients' standard error thereby render tough or unfeasible evaluation of the distinctive role of each independent variable (IV). As straightforward correlations reveal a little about multi-collinearity, the favourable means of gauging multi-collinearity is via regression of each independent variable (IV) with the rest of the IVs. The correlation result shows merely bivariate multi-collinearity, using standard condition of bivariate correlations exceeding .90. In evaluating multivariate multi-collinearity, this research employs tolerance or VIF (variance influence factor), which incorporate the regressing of each IV on all the other IVs (Hair et al., 1998). Even there exist the multi-collinearity, the approximations of the significance of other IVs in the relationship (IVs which are not collinear with others) are not influenced.

Within the formula for computing b (partial regression) coefficient confidence limits, tolerance is an element in the denominator. In the regression of that IV on all the other IVs, tolerance refers to 1 - R^2. Thus the number of tolerance coefficients is as the number of total IVs (Kinnear., 2004; Zikmund, 2003). As tolerance near zero it is considered large multi-collinearity in this IV to rest of IVs as well as the b and beta coefficients are in states of instability. In addition, standard error of regression coefficients will be higher. As a rule of thumb, according to Cohen and Cohen, (1983) when tolerance is below .20, it signifies an issue with multi-collinearity.

According to Hair et al., (1998) the variance-inflation-factor (VIF) refers to tolerance's reciprocal. As such, if variance-inflation-factor is large (should be less than 3) there will be large multi-collinearity and hence instability in b as well as beta coefficients. It is the collinearity statistics of the SPSS output section where VIF as well as tolerance can be checked.

3.7.6 Hypothesis Testing

Regression analysis is the best suited technique to this research to ascertain if the hypotheses developed are correct (Zikmund, 2003). To examine how a set of metric independent variables (IV) are influencing the metric dependent variable (DV), the researcher has suggested regression as the suitable statistical method in this research. It illustrates the insinuation of each IV and their influences on the DV.

All the scales of IVs are to be computed for their internal consistency using Cronbach alpha analysis. All the variables' distribution will have to be near normality. The

regression model is to be measured for multi-collinearity. According to Ho, (2006) it is anticipated that only multiplied variables will exhibit multi-collinearity and this does not influence this framework as well as other variables.

Hypotheses 1 through 3 are to be analysed adopting the multiple-regression techniques. To assess the strength of the potential positive relationships of the three IVs, they are to be regressed on a DV performance of SMEs, based on the research questions and objectives.

3.8 Chapter Summary

Chapter three explains the research methodology and research design being adopted within quantitative research. The research design explores the past and present research methods. Subsequently, it describes the operational definitions and instrumentation of the variables. Finally, it elucidates the sampling procedures, data collection processes, pre-test/pilot test and various kinds of data analysis to be used in this study.

CHAPTER FOUR : FINDINGS

4.1 Introduction

Chapter four describes analytical processes employed in this study. It is structured to provide a detail discussion on the results of the empirical data of the hypothesized model. That is, it starts from the pre-testing of the survey, followed by the evaluation of the hypotheses with their support based on the data analysis and end with a summary.

The approach of the analysis consists of three sections. Section 4.2 first presents the data collection process and survey response. Section 4.3 provides a presentation and detail discussion of the data analysis. The demographic profiles of the respondents are examined in section 4.3.2. Apart from the reliability test discussion, pre-requisite tests such as those in data cleaning are included in section 4.3.4. The evaluation of the hypothesized framework is presented in section 4.4. The hypotheses developed in Chapter 2 are tested using linear and multiple regressions. All the data analyses are performed using SPSS version 19 as the statistical computing tool.

4.1.1 Pilot test

The purposes of the pilot test are to estimate how the potential respondents react to the quality of the questionnaires, to ask what critical comment they have on how clear the scales are, and to ensure the instruments are reliable. As per planned, a pilot test had been conducted with 40 owner/managers of the SMEs in Malaysia. The selection of participants was SME owners who are located in whole Malaysia. Some of the participants were sent with the questionnaires, while others were self-administered during

the face-to-face interviews. According to Sekaran (2006), the main advantage of face-to-face interviews is that the researcher is able to adapt the questions as necessary, clarify doubts and ensure that the respondents properly understood the questions. The reliability of the survey instruments was tested using the Cronbach's alpha coefficients. The results of the pilot tests shown in below Table 4.1, indicate that the coefficients are greater than 0.7, which implies a satisfactory reliability (Nunnally, 1978; Cortina, 1993).

Table 4.1
Reliability test results for pilot run

Variables	Dimensions	Number of items	N	Cronbach's alpha
Independent Variable 1 IV1	Entrepreneurial Orientation EO	9	40	0.842
Independent Variable 2 IV2	Entrepreneurial Values EV	15	40	0.774
Independent Variable 3 IV3	Knowledge Creation Process KCP	16	40	0.892
Dependent Variable DV	Firm Performance FP	10	40	0.940

4.2 Data Collection Process and Survey Responses

As explained in Chapter Three, the sampling frame represents a listing of 86 percent (or 14,609) of all SMEs (or 17,016) and is highly representative of the industry as a whole. A sample size of at-least 370 was decided based on the suggestion by Saunder, Lewis and Thornhill (2012). Thus with estimated 20 percent response rate, the number of questionnaires used was 1850. Per discussed, under the simple random sampling technique, the respondents of data collection were chosen randomly without replacement. Starting from the end of February 2012, a total of 1850 questionnaires were send to SMEs all over Malaysia, with the owner/managers of the SME as the addressee since they are

the targeted respondents. Every mailed questionnaire was enclosed together a cover letter and a self-addressed return envelope with postage stamp. At the end of September 2012, merely 130 questionnaires which correspond to a response rate of 7 percent were received by the researcher. This is expected as in mail surveys of the SME businesses, the response rate is usually much lower than anticipated due to the lack of time and availability of resources to respond (Lu & Beamish, 2001; Bartholomew & Smith, 2006).

Owing to the poor response rate via post, in parallel the researcher used another approach in September 2012 by following up via interviewing the owner/managers directly through phones. The key benefit of telephone interviewing is that a number of different people can be contacted in a quicker mode (Sekaran, 2005). This was basically carried out by phoning the owner/managers directly to confirm with them whether they received the questionnaires or not. It yes, the owner/managers were kindly requested to response to the questionnaires either directly via the phones or faxed/mailed their responses to the researcher. With this telephone interviewing approach, the researcher managed to acquire another 63 responses.

The researcher in December 2012 has send reminder post-cards to all the remaining respondents who are yet to reply from initial mail list. Through further extensive follow-up with phone calls, the researcher was able to obtain another 189 more responses from the owner/managers by July 2013 in the span of seven months.

Overall, 382 questionnaires were collected. However, from the 382 returned responses, 12 questionnaires received through post mail were found to be unacceptable and rejected as

there are missing answers on some (more than two) questions in the questionnaires. Thus only 370 questionnaires were accepted and applicable for further analysis. Below Table 4.2 shows the summary of the overall responses of the questionnaires sent.

Table 4.2
Summary of questionnaires responses

Description	N	Percentage
Total questionnaires sent via post mail	1850	100
Total questionnaires received via post mail	130	7.0
Total questionnaires received via phone (phase 1)	63	3.4
Total questionnaires received via phone (phase 2)	189	10.2
Total questionnaires collected	382	20.65
Total questionnaires rejected	12	0.65
Total accepted questionnaires	**370**	**20**

4.3 Data Analysis

Following are the statistical data analysis or techniques conducted to gauge the growth performance of SMEs.

4.3.1 Demographic Profiles of the SMEs Respondents and Businesses

Majority of the respondents are involved in Services(including ICT) 32.4 percent and Manufacturing Related Services 27.6 percent. The rest are involved in Manufacturing(include agro based) 18.9 percent and Construction 17.8 percent plus a minor of 3.2 percent in other services such as Finance and Training etc. (Please see Table 4.3 below).

Table 4.3
Type of company

Type of company	Frequency	Percent

Manufacturing(including agro based)	70	18.9
Manufacturing Related Services	102	27.6
Services(including ICT)	120	32.4
Construction	66	17.8
Others	12	3.2
Total	370	100

Most of the SMEs have range of number of employees between 20 - 50 (53.2 percent) and 5 - 19 (19.7 percent). The rest falls into group of 51 -150 (13.8 percent) and in the group of 151-200 (3.2 percent) employees. (Please see Table 4.4 below).

Table 4.4
Number of employees

Number of employees	**Frequency**	**Percent**
< 5	37	10
5 - 19	73	19.7
20 - 50	197	53.2
51- 150	51	13.8
151- 200	12	3.2
Total	370	100

The study finds that the amount of capital invested by the SMEs mostly fall into the range of >RM20,000–50,000 (23.8 ercent) and >RM50,000–100,000 (21.1 percent), whereas 16.2 percent invested in range of >RM10,000–20,000; 13.2 percent invested in range of >RM100,000–200,000 and 11.4 percent in range of >RM200,000–500,000. The rest falls into group of >RM500,000–1,000,000 (5.4 percent), >RM5,000–10,000 (5.7 percent) and ≤ RM5,000 (3.2 percent). There are no SMEs invest more than RM1 million. (Please see Table 4.5 below).

Table 4.5
Amount of capital

Amount of capital	Frequency	Percent
≤ RM5,000	12	3.2
>RM5,000–10,000	21	5.7
>RM10,000–20,000	60	16.2
>RM20,000–50,000	88	23.8
>RM50,000–100,000	78	21.1
>RM100,000–200,000	49	13.2
>RM200,000–500,000	42	11.4
>RM500,000–1,000,000	20	5.4
>RM1,000,000	0	0
Total	370	100

The study also finds that the amount of annual sales turnover achieved by the SMEs mostly fall into the range of >RM200,000–250,000 (29.5 percent) and >RM250,000–1million (28.6 percent), whereas 21.1 percent falls in group of <RM200,000; 10.8 percent achieves in range of >RM1million–5million and 6.5 percent in range of >RM5million–10million. The rest falls into group of >RM10million-25million (1.6 percent), and >RM25million-50million (1.9 percent). (Please see Table 4.6 below).

Table 4.6
Annual sales turnover

Annual sales turnover	Frequency	Percent
< RM200,000	78	21.1
>RM200,000–250,000	109	29.5
>RM250,000–1million	106	28.6
>RM1million–5million	40	10.8
>RM5million–10million	24	6.5
>RM10million–25million	6	1.6
>RM25million–50million	7	1.9
Total	370	100

Most of the SMEs are established in range of 5 to 10 years in operation (27.8 percent), less than 5 years (25.4 percent) and between 11 to 15 years (20.3 percent). The rests fall into range of 16 to 20 years (15.1 percent) and more than 20 years (11.4 percent). (Please see Table 4.7 below).

Table 4.7
Years in operation

YEARS IN OPERATION	Frequency	Percent
< 5	94	25.4
5 - 10	103	27.8
11- 15	75	20.3
16- 20	56	15.1
> 20	42	11.4
TOTAL	370	100

In the questionnaire of this study, the SME stage of business or enterprise life cycle is determined by owner/managers perception. The stage of business is based on adaptation from Pümpin and Prange, (1991) model of business development (Belak & Milfelner, 2011). Pümpin and Prange, (1991) delineate four stages that appropriately depicting the business development stages as "pioneer (starting & surviving), growing, maturing, and in turnover (declining)". They regard enterprise development is determined through the employment of business opportunities. Since business opportunities have their life cycle that in matter of time will ends up to declining stage, an enterprise must explore and find out novel business opportunities (Duh, 2002) to sustain.

From the data collected, most of the SMEs survey samples are at survival stage (36.8 percent) while 24.1 percent are in starting and 22.7 percent are in growing stage. The rests

are in maturing stage (14.1 percent) and only a small number (2.4 percent) are in declining stage. (Please see Table 4.8 below).

Table 4.8
Stage of business

Stage of business	Frequency	Percent
Starting	89	24.1
Surviving	136	36.8
Growing	84	22.7
Maturing	52	14.1
Declining	9	2.4
Total	370	100

In short, this study has done a survey of superior distribution in terms of type of business, number of employee, amounts of capital, size of business(in term of annual sales turnover), years in operation and stage of business.

4.3.2 Reliability Analysis Results

Reliability which is referred as internal consistency also points to the extent to which the measurement instrument precisely and repeatedly measures the intended construct (Churchill, 1979; Peter, 1979). In other words, the measure is considered reliable if the results of a measure can be repeated. Thus this reliability tests are done to measure and establish both the consistency and stability (Cavana, Delahaye & Sekaran, 2001) of all valid questionnaires. If the cronbach's alpha is greater than 0.7 (Cortina, 1993), then the measure is considered item specific variance (Cortina, 1993).

Table 4.9
Reliability test results of whole sample size

Variables	Dimensions	Number of	N	Cronbach's alpha

		items		
Independent Variable 1 IV1	Entrepreneurial Orientation EO	9	335	0.751
Independent Variable 2 IV2	Entrepreneurial Values EV	15	335	0.805
Independent Variable 3 IV3	Knowledge Creation Process KCP	16	335	0.807
Dependent Variable DV	Firm Performance FP	10	335	0.950

Using SPSS 19.0 for the reliability analysis, the results of N=335 (Note: The total valid sample size for IV3 was 335 instead of 370 because cases where there are missing data in item KCP6 were deleted, see section 4.3.3.a) shown in Table 4.9 above indicates the Cronbach's alphas of the variables are more than 0.7 (Cortina, 1993), without deleting any of the item of the measurement. Thus, it can be concluded again that the questionnaires used in this survey are consistent, reliable, stable and accurate.

4.3.3 Data Screening/Cleaning

After the reliability test, the following data screening/cleaning process was carried out to ensure sound data are used for further analysis. The purpose of data screening/cleaning is to check if data have been entered correctly, such as out-of-range values; to check for missing values, and deciding how to deal with the missing values, and to check for outliers, and deciding how to deal with outliers.

a. Detection of Missing data

The first step with "Data Screening" is using "Frequencies" in SPSS 19.0 for the missing data analysis of all the variables. The results from the "Statistics" box Frequency tables reveal item KCP6 contains missing values. The reported frequency is 35 or 9.5 percent of the total 370, as shown in Table 4.10 below.

Table 4.10
Missing data results

KCP6: "My firm usually adopts groupware and other team collaboration tools"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	33	8.9	9.9	9.9
	Agree	137	37.0	40.9	50.7
	Strongly Agree	165	44.6	49.3	100.0
	Total	335	90.5	100.0	
Missing	System	35	9.5		
Total		370	100.0		

The researcher regards these missing data are non-random. This is because as the question "My firm usually adopts groupware and other team collaboration tools" may not provide appropriate answer choices, such as "no opinion" or "not applicable". As such, the respondent had chosen not to answer the question. The treatment of these missing data was that cases associate with it were deleted. The researcher has made this decision as retaining the item KCP6 is far more important, especially for subsequent factor analysis, than keeping the 35 cases (Hair, Black, Babin & Anderson, 2010, p.96). KCP6 is an important item in Externalization dimension of the KCP construct (Nonaka, 1994). In other words, the total valid sample size for testing was 335 instead of 370.

b. Outlier

As mentioned in Chapter Three, outliers are data that look very unique or 'far' from other observations and perceive as extreme value for a single variable (univariate) or combination of variables (multivariate) (Ghozali, 2005). The revelation of univariate outliers can be done by determining the limit value which is categorized as an outlier data. Using SPSS 19.0 Analyze --> Descriptive Statistics --> Explore, the test results of the

outlier data show that most of the outliers are mild outliers (boxplot with dot) that need not to be treated. There are a few extreme outliers (boxplot with star) shown related to few items in EV. However, these extreme values are near to the median, thus the researcher has decided to do nothing. Furthermore, conducting research is about discovering empirical reality. If the respondent chose to respond with that value, then that data is a reflection of reality, so removing the "outlier" is the antithesis of why the researcher conducts research.

4.3.4 Descriptive Analysis Test

Descriptive statistical tool are used by the researcher to compute the central tendencies and the dispersions of the data set of interval-scale variables, via the values of means and standard deviations (Meier & Brudney, 1987; Kazmier, 1996; Webster, 1998; Sekaran, 2006). Below tables summarizes the mean level and standard deviation of each variable in the model. Discussion of the results will be on Chapter 5.

Table 4.11
Descriptive statistics for composite variables

Variables	Dimensions	Mean	Std Deviation	N
IV1	EO_C	4.5400	.34917	335
IV2	EV_C	4.3144	.26030	335
IV3	KCP_C	4.3185	.28842	335
DV	FP_C	4.4161	.56804	335

Table 4.12
Descriptive statistics for variable items in EO

Variable Items	Mean	Std Deviation	N
EO1	4.16	.855	335
EO2a	4.48	.660	335
EO2b	4.68	.472	335
EO3a	4.64	.486	335
EO3b	4.54	.592	335
EO3c	4.59	.510	335
EO4r*	4.58	.500	335
EO5	4.44	.790	335
EO6	4.66	.475	335

* *EO4r : Reverse-coded for EO4*

Table 4.13
Descriptive statistics for variable items in EV

Variable Items	Mean	Std Deviation	N
EV1	4.38	.539	335
EV2	4.19	.409	335
EV3	4.39	.603	335
EV4r*	4.23	.442	335
EV5	4.24	.431	335
EV6	4.71	.459	335
EV7	4.25	.434	335
EV8	4.45	.504	335
EV9	4.32	.468	335
EV10	4.38	.493	335
EV11	4.10	.322	335
EV12	4.39	.523	335
EV13	4.25	.436	335
EV14	4.24	.429	335
EV15	4.18	.386	335

* *EV4r : Reverse-coded for EV4*

Table 4.14
Descriptive statistics for variables items in KCP

Variable Items	Mean	Std Deviation	N
KCP1	4.49	.501	335
KCP2	4.49	.507	335
KCP3	4.36	.481	335
KCP4	4.67	.469	335
KCP5	2.81	.731	335
KCP6	4.39	.661	335
KCP7	4.02	.858	335
KCP8	4.51	.623	335
KCP9r*	4.36	.630	335
KCP10	4.48	.500	335
KCP11	4.29	.461	335
KCP12	4.55	.510	335
KCP13	4.46	.499	335
KCP14	4.55	.498	335
KCP15	4.46	.511	335
KCP16	4.42	.562	335

* *KCP9r : Reverse-coded for KCP9*

Table 4.15
Descriptive statistics for variable items in FP

Variable Items	Mean	Std Deviation	N
FP1	4.30	.659	335
FP2	4.39	.700	335
FP3	4.50	.604	335
FP4	4.25	.759	335
FP5	4.39	.807	335
FP6	4.58	.495	335
FP7	4.49	.501	335
FP8	4.30	.743	335
FP9	4.39	.803	335
FP10	4.58	.494	335

4.3.5 Assumptions for Multiple Regressions

Prior performing the multiple regression analysis, there are four assumptions namely normality, linearity, homoscedasticity and independence of residuals that have to be fulfilled first (Tabachnick & Fidell, 2007). Techniques like residual scatter plot, histogram, scatterplot diagrams (i.e. the Q-Q plot and detrended Q-Q plot), regression standardized residual normal probability plot (P-P plot) and Durbin Watson statistics (Hair et al., 2006) were employed to test these assumptions. Furthermore, for a relative large sample like N = 335 in this study, it is recommended that Central Limit Theorem is very much relevant and the normality can be thereby taken for granted (Alam & Yasin, 2010).

4.3.5.1 Normality

The simplest method for the graph of normality assumption is the Histogram and Stem-and-leaf plot (Coakes & Steed, 2003; Kirkpatrick & Feeney, 2005) and for the statistical test of normality is the Skewness and Kurtosis (Coakes, 2005; Carver & Nash, 2005). The criteria under the normal area where skewness value should be below than 2.0 and kurtosis value below than 7.0.

Using SPSS 19.0 for the normality analysis, the test results (of all the variables did not violate the assumption of normality(using Histogram with normal curve). In the statistical test of normality, the results shown only item EV11 has skewness slightly more than 2 (i.e. 2.094) but with Kurtosis less than 7. Thus overall, it is still ok. "Test of Normality" box gives the K-S and S-W test results. All variables test results are significant (less than .05), then the data should be non-normal. However, as the sample size is large (n=335 >100), it

is more likely for the results to get significance. So the significance of the K-S and S-W tests in this case, may only indicate slight deviations from normality. As such, the researcher needs to eyeball the data (using histograms) to determine if the data rise to the level of non-normality. In addition, further test on the PP plot was carried out. From the Figure 4.1 shown below, there is a close association between the cumulative normal distribution line and the individual data point values. These results indicate that the data collected for the firm performance factor is normally distributed and characterizes the population of the research.

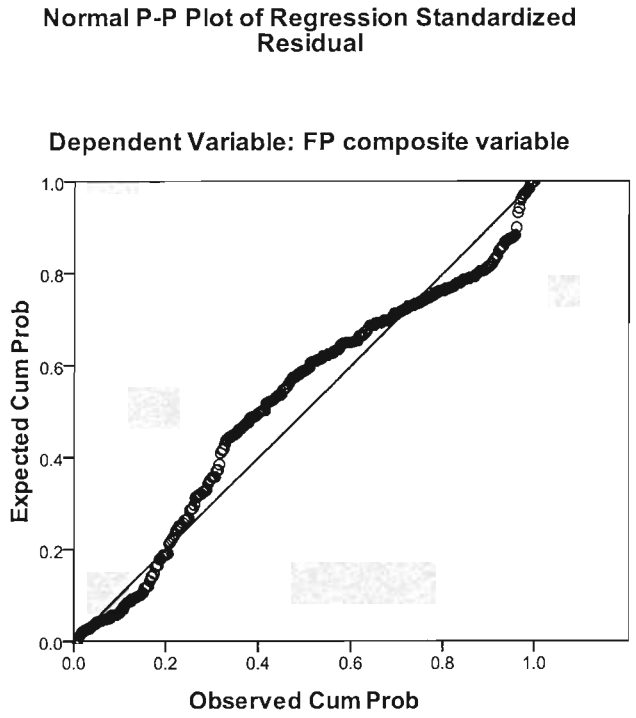

Figure 4.1
Normal Probability (P-P) Plot of Firm Performance

Thus in short, overall data are considered reasonably in normality, a parametric test can be used as statistical analysis (Cooper & Schindler, 2003).

4.3.5.2 Linearity

Tabachnick and Fidell, (2007) suggest that the linear relationship between independent variable and dependent variable is the most important fundamental assumption of linearity. It is recommended that "a linear relationship should exist between the dependent variable and covariate for each group and this relationship can be verified by inspecting the scatter plot for each group" (Coakes, Steed & Dzidic, 2006). Simple residual plots are plots of standardized residuals against standardized estimates of Y, the dependent variable. In SPSS this is ZRESID vs. ZPRED. Tabachnick and Fidell, (2007) suggest that, "if most of the residuals are scattered around the zero points and have oval-shapes, it means that the assumption of linearity is made". Besides, Tabachnick and Fidell, (2007) also suggest that a non linear relationship will under-estimate the actual strength of a relationship and thereby should be ignored from an analysis. Figure 4.2 below illustrated that most of the residual were concentrated around the zero points and have oval-shapes, signifying that the assumption of linearity was valid.

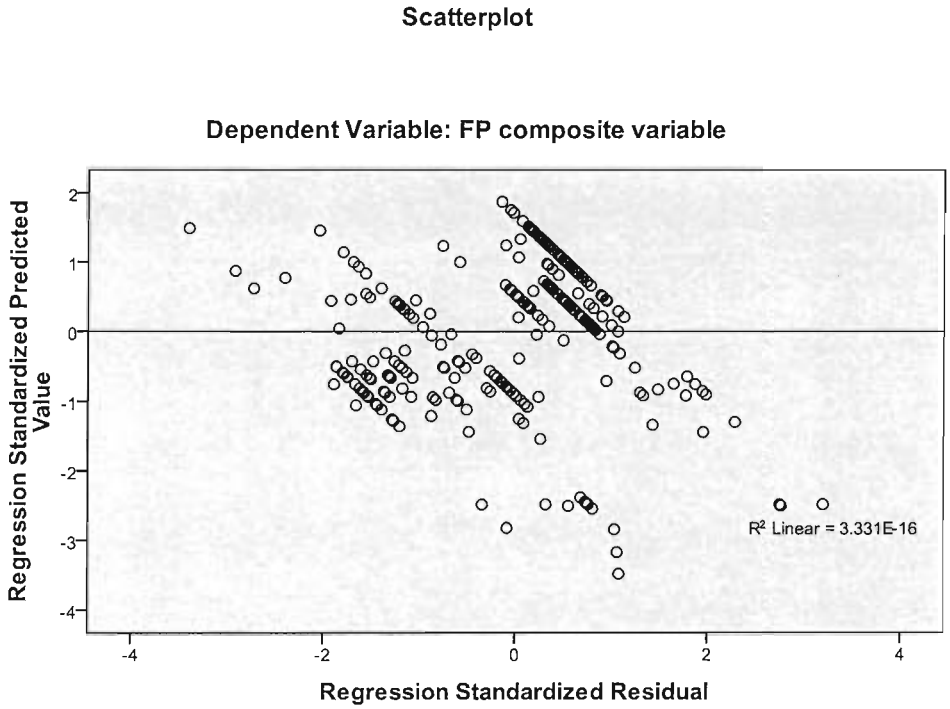

Figure 4.2
Scatter Plot Diagram (i.e. Q-Q Plot and Detrended Q-Q Plot)

4.3.5.3 Homoscedasticity

Coakes et al., (2006) regard homoscedasticity as "the variability in scores for one variable is roughly the same at all values of the other variables, in other words it concerns on how the scores cluster uniformly about the regression line". To test the residuals against the predicted values, scatter plots can be employed (Hair et al., 2006). The result of the scatter plots in Figure 4.2 reveals there is no regular trend of increasing or decreasing residuals against the predicted value. As such, the assumption of the homoscedasticity was regarded as valid also.

4.3.5.4 Independence of Residual

Independence of residual is another assumption for multiple regressions that ensure that a regression model is free or independent of error (Hair et al., 2006). "Durbin Watson test" is a statistical test that can be used to check whether the independence of residual is fulfilled (Coakes et al., 2006). To fulfil this multiple regression assumption, the Durbin Watson reading should be between the ranges of 1.50 to 2.50. Table 4.16 below shows the outcome of the independent of residual result. As the reading of Durbin-Watson statistics was 2.068 falls inside the required range of 1.50 to 2.50, thus demonstrating there is no problem in independence of residual. Hence, this assumption was regarded as valid also.

Table 4.16
Result of independence of residual test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	**Durbin-Watson**
1	.611[a]	.373	.367	.45190	**2.068**

In conclusion, the four assumptions of multiple regression analysis that is normality, linearity, homoscedasticity and independence of residuals have been fulfilled. Thus the data in this study is suitable for further regression and hypothesis analysis.

4.3.6 Factor Analysis

Per explained in Chapter 3, factor analysis was used to disclose the latent structure (dimensions) of a set of research variables. It reduces attribute space from a larger number of variables to a smaller number of factors and as such is a "non-dependent" procedure (Cohen, 1983). It is exploring for the data summarization from the original variables

towards reduced set of dimensions or factors (Hair, Black, Babin & Anderson, 2010, p.96) or to find and classify the basic dimensions or constructs that lie beneath the original variables (Borsboom, Mellenbergh & van Heerden, 2003). Thus in this study, apart from the provision of data reduction, factor analysis helps to categorize the factor structure from the variables or to recognize the perceptions which are to be "grouped" together (Hair et. al., 2010, p. 129).

4.3.6.1 KMO and Sphericity Tests

Kaiser-Meyer-Olkin (KMO) value explains the validation of a scale or index by demonstrating that its constituent items load on the same factor, and unloaded the proposed scales items which cross-load on more than one factor. KMO, which is the measure of sampling adequacy, is used to compare the magnitudes of the observed correlation coefficients in relation to the magnitudes of the partial coefficients. Large KMO values are good because correlation between pairs of variables (i.e., potential factors) can be explained by the other variables. If the KMO less than .5, subsequent factor analysis should not be carried out.

Bartlett's test of sphericity is used to test the hypothesis that the correlation matrix is an identity matrix (all diagonal terms are one and all off-diagonal terms are zero). The researcher is looking for 'Significance' value to be less than .05 as the variables are required to be correlated. If they are not correlated to the other items then they cannot be part of the same factor.

Table 4.17
Summary of KMO and sphericity tests results

Variables	Items	KMO	Bartlett's Test of Sphericity: Sig.
EO only	EO1-EO6	.705	.000
EV only	EV1-EV15	.902	.000
KCP only	KCP1-KCP16	.711	.000
EO, EV and KCP	All items as above	.749	.000
FP	FP1-FP10	.879	.000

Table 4.17 above shows the summary of the results (initial values before any deletion of items) with KMO greater than .70 and Sphericity Sig less than .001 for all variables in the model. These results indicate the researcher can proceed with the Factor Analysis PCA.

4.3.6.2 Principal Component Analysis (PCA)

Principal Component Analysis (PCA) refers to factor extraction method that constructs the linear-combinations for the variables under observation. The first principal-component refers to the combination of items (or variables) which is accountable to the highest sum of variance within the model. The second principal-component is accountable to next highest sum of variance, plus no correlation to the first one, and the rest follows the same approach. There will be differences in the variance-explained percentage if dissimilar methods were chosen. The outcome before 'rotating' the solution refers to the unrotated-factor-solution where rotation denotes the initial matrix being transformed to a form ready for interpretation. Rotation simplifies analysis structure where each factor would show non-zero loadings for merely a few variables with no influence on communalities as well as the variance-explained percentage. As explained in previous section 3.5.2, in this study,

Varimax is the most appropriate approach that reduces the number of variables which show large loadings onto a factor.

a. PCA with all Independent Variables (IVs) together

Following factor analysis was done with all the three IVs namely EO, EV and KCP analyzed together. After several rotations, below is the final outcome of the PCA which saw some of the items/questions are not retained, i.e. EV1, EV3, EV6, KCP4 and KCP5.

The total variance-explained by each factor refer to the eigenvalue. 'Factor' which shows smaller than one in eigenvalue will be ignored as its variance-explained is insufficient in representation of a unique factor. It is noticeable components 7 and below have eigenvalues smaller than 1.0, thus they will be omitted in the analysis. Also cumulative percentage of the six components is 72.337 percent which shows smaller than 100 percent. The reason is not every variance is retained in explaination where in this case, only six factors are included in final analysis whilst component 7 to 35 are omitted albeit in total they constitute 27.663 percent of the variance explained. Also, any one of these (7 to 35) factors account for very little variance.

Table 4.18
Factor Analysis of all IVs together

			Rotated Component factor loadings					
IV	**Dimension**	**Items**	**1**	**2**	**3**	**4**	**5**	**6**
EO	Innovativeness	**EO1**: "My top managers/owner favours a strong emphasis on R&D, technological leadership, and innovations."						.883
		EO2a: "My firm has many new lines of products/services marketed in the past 5 years."						.765
		EO2b: "Changes in product or service lines have usually been quite dramatic."						.831
	Pro-activeness	**EO3a**: "In dealing with its competitors my firm typically initiates actions which competitors then respond to."					.892	

		EO3b: "In dealing with its competitors my firm is very often the first business to introduce new product/services, administrative techniques, operating techniques, etc."					.819	
		EO3c: "In dealing with its competitors my firm typically adopts a very competitive 'undo- the-competitors' posture."					.883	
	Risk-taking	**EO4r**: "My firm usually has a strong tendency for low risk projects (with normal and certain rates of return)."				.763		
		EO5: "Owing to the nature of the environment, wide-ranging acts are necessary to achieve the firm's objectives."				.879		
		EO6: "Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities."				.848		
EV		**EV2**: "I started up this business because of money creation."	.752					
		EV4r: "I conduct this business because I do not want to achieve success in my life."	.569					
		EV5: "I believe that the success of this business start up comes from hard work."	.747					
		EV7: "I fear of losing if I push the business ahead."	.923					
		EV8: "I do not want to expand my business because of my exhaustion."	.594					
		EV9: "I believe on running my own business rather than depending on destiny."	.776					
		EV10: "I can do this kind of business because I have skills/knowledge/experience."	.565					
		EV11: "I fear to expand the business because my skills are not strong enough."	.689					
		EV12: "I can run the business because I have learned through family experience in business."	.443					
		EV13: "I value on learning to improve my business."	.845					
		EV14: "I have a plan to run my business well."	.808					
		EV15: "I spend my spare times in business rather than go for a holiday."	.880					
KCP	Socialization	**KCP1**: "My firm usually adopts cooperative projects across directorates."			.970			
		KCP2: "My firm usually uses apprentices and mentors to transfer knowledge."			.967			
		KCP3: "My firm usually adopts brainstorming retreats or camps."			.778			
	Externalization	**KCP6**: "My firm usually adopts groupware and other learning collaboration tools."			.925			
		KCP7: "My firm usually adopts pointers to expertise."			.877			
		KCP8: "My firm usually adopts modelling based on analogies and metaphors."			.822			
		KCP9r: "My firm usually does not capture and transfer experts' knowledge."			.603			
	Combination	**KCP10**: "My firm usually adopts web-based access to data."		.874				
		KCP11: "My firm usually uses web pages (intranet and Internet)."		.706				
		KCP12: "My firm usually uses databases."		.949				
		KCP13: "My firm usually adopts repositories of information, best practices, and lessons learned."		.799				
	Internalization	**KCP14**: "My firm usually adopts on-the-job training."		.953				
		KCP15: "My firm usually adopts learning by doing."		.916				
		KCP16: "My firm usually adopts learning by observation."		.888				
Eigenvalues								*25.317*
Percentage of variance explained								***72.337***
KMO								.812

Bartlett Test of Sphericity:	11760.725
Approx. Chi Square	595
Df	.000
Sig.	.812

Note: EO4r : Reverse-coded for EO4
EV4r : Reverse-coded for EV4
KCP9r : Reverse-coded for KCP9

The Rotated Component Matrix for oblique rotation shown in Table 4.18 above reports the factor loadings for each variable on the components or factors after rotation. This rotated solution shows how each item correlates with each factor. Note that there are missing values since the researcher 'suppress values less than .40' to ensure the matrix simpler to comprehend. According to Hair et. al., (2010) p.117, with sample size of 350 the cut-off point could be .30. However, Hair et al., (2010) rules of thumb 3-5 in p.118, also state that "Although factor loadings of .30 to .40 are minimally accepted, values greater than .50 are generally considered necessary for practical significance". Thus for this study (sample size 335), the chosen cut-off point is the one in-between, which is .40 (Hair et al., 2010, p.136-138). The matrix can be seen that how items are grouped together with its appropriate factor and hence the construct these items represent, as follows.

In EO, 9 out of 9 items/questions retained after varimax rotation. That is, all three Innovativeness items (EO1, EO2a, EO2b in factor component No.6); all three Pro-activeness items (EO3a, EO3b, EO3c in factor component No.5) and all three Risk-taking items (EO4r, EO5, EO6 in factor component No.4). In other words, since EO is in 3 factors structure, it should be three dimensional instead of unidimensional IV in this study.

In EV, 12 out of 15 items/questions are retained (in factor component No.1). Since all fall into single factor structure, EV is therefore unidimensional. Items EV1, EV3 and EV6 are deleted.

In KCP, most of the items/questions are retained, 14 out of 16 questions. As shown in the two factors structure, KCP should be two dimensional instead of unidimensional. That is, socialization-cum-externalization as one dimension (i.e. socialization items KCP1, KCP2, KCP3 and externalization items KCP6, KCP7, KCP8, KCP9r all in factor component No.3); and combination-cum-internalization as another dimension (i.e. combination items KCP10, KCP11, KCP12, KCP13 and internalization items KCP14, KCP15, KCP16 all in factor component No.2). Items KCP4 and KCP5 are deleted.

Table 4.19
Summary of reliability coefficient alpha for all IVs after FA

Independent Variables	No. of items	No of Items deleted	Cronbach Alpha
EO	9	None	.800
EV	15	3	.910
KCP	16	2	.874

Table **4.19** above shows a summary of reliability coefficient alphas for all independent variables under study after the factor analysis. The coefficient alphas values for this study ranged from .800 to .910 which indicate that the instruments used, after factor analysis, are highly reliable, consistent and stable measures (Cortina, 1993).

The SPSS output for this factor analysis can be found in Appendix B.

b. PCA on Dependent Variable (DV)

Following factor analysis was done with the only DV: FP1 through FP10. The final outcome of the PCA which saw all ten items are retained. Only factor loadings of at least .40 were considered and therefore no items were deleted. The cumulative percentage is 75.174 percent which is high and good representation of the overall variance explained.

Table 4.20
Factor Analysis of DV only

Items	Description	Loadings
FP1	"My firm is usually satisfied with return on investment"	.795
FP2	"My firm is usually satisfied with return on equity"	.758
FP3	"My firm is usually satisfied with return on assets"	.662
FP4	"My firm is usually satisfied with sales growth"	.877
FP5	"My firm is usually satisfied with employee growth"	.959
FP6	"My firm is usually satisfied with market share growth"	.935
FP7	"My firm is usually satisfied with return on sales"	.853
FP8	"My firm is usually satisfied with net profit margin"	.885
FP9	"My firm is usually satisfied with gross profit margin"	.957
FP10	"My firm is usually satisfied with overall performance/success"	.939
Eigenvalues		*7.517*
Percentage of variance explained		***75.174***
KMO		*.879*
Bartlett Test of Sphericity:		
	Approx. Chi Square	*6158.775*
	Df	*45*
	Sig.	*.000*
Cronbach Alpha		*.950*

As shown in above Table 4.20 results, the single factor loading extraction of firm performance FP instruments also justified FP as unidimensional construct. That is,

together efficiency(3 items: FP1,2,3), growth(3 items: FP4,5,6) and profit(4 items: FP7,8,9,10) as one dimensional construct since all fall into single factor structure. Also the reliability coefficient of .950 for the firm performance instruments was very much higher than the threshold of 0.70 as recommended by Nunnally (1978) and Cortina (1993).

The SPSS output for this factor analysis can be found in Appendix B.

These findings from the factor analysis on the IVs and DV set the new basis for the subsequent regression and hypothesis testing. That is only those items retained will be used in these following tests and analysis. As such, the hypotheses will be reformulated accordingly, to be either uni- or multi-dimensional discovered from the above factor analysis.

4.3.7 Correlation Analysis

Correlation analysis was carried out to observe the strength, direction and significance of the correlation between the variables of the research (Sekaran, 2006). Pearson's correlation coefficients 'r' could vary from -1 to + 1, and if the correlation is nearer to one (more than 0.9) then this it interprets as a multi-collinearity threat (Sekaran, 2006). The correlation coefficient could also be interpreted as very weak and negligible (0.0 to 0.2), weak and low (0.2 to 0.4), moderate (0.4 to 0.7), strong, high and marked (0.7 to 0.9), and very strong and very high (0.9 to 1.0) (Rowntree, 1987).

As the researcher will be using the retained dimensions after FA for later multi-regression and hypotheses testing, Table 4.21 below showed a detail summary of mean, standard deviations SD and correlations for all dimensions of EO, EV, KCP and FP composite

variables retained after FA. Results showed all variables have a high score mean whereby proactiveness of EO (EO_P_C) having exceptional score mean of 4.5940, followed by risk-taking of EO (EO_RT_C) which is 4.5940. Mean score of dependent variables firm performance FP_C is 4.4161 which is considered as visibly high. Correlation between all the independent variables was very weak and negligible (less than .2) except proactiveness vs risk-taking of EO which is still considered not strong (less than .5). Thus there should be no multi-collinearity threat in this study which will be further confirmed in next section. Correlation between all the dependent and independent variables were statistically significant ranging from $r = 0.124$ ($p < 0.05$) to $r = 0.735$ ($p < 0.01$). Correlation analysis, nevertheless, shows only a clear depiction of the nature, association and strength of the relationship between variables. It does not analyze the predictor nature of the variables in the relationship of two or more variables (Hair et al., 2003). Thus, it is only a preliminary step in the statistical analysis process.

Table 4.21
Descriptive statistic and correlation of all variables after FA

	Mean	**SD**	**EO_I_C**	**EO_P_C**	**EO_RT_C**	**EV_EC**	**KCP_SE_C**	**KCP_CI_C**	**FP_**
EO_I_C	4.4408	.57074	1						
EO_P_C	4.5940	.48500	.103	1					
EO_RT_C	4.5602	.54070	.219**	.455**	1				
EV_EC	4.2697	.31408	.164**	.037	.126*	1			
KCP_SE_C	4.3740	.52139	.011	-.138*	.133*	.091	1		
KCP_CI_C	4.4584	.44283	-.027	-.168**	.093	-.058	.040	1	
FP_C	4.4161	.56804	.235**	.405**	.735**	.146**	.124*	.131*	

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

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

Note: Following were used in the above analysis:

EO_I_C = Composite variable for innovativeness of EO.

EO_P_C = Composite variable for proactiveness of EO.

EO_RT_C = Composite variable for risk-taking of EO.

EV_EC = Effective composite variable for retained 12 items of EV after FA.

KCP_SE_C = Composite variable of retained 7 items socialization-cum-externalization of KCP.

KCP_CI_C = Composite variable of retained 7 items combination-cum-internalization of KCP.

FP_C = Composite variable for all FP items since no items are deleted after FA.

4.3.8 Multi-collinearity

Prior predicting the hypothesized conceptual model, multicolinearity testing among independent variables is largely suggested (Hair et al. 1998). Multi-collinearity refers to an issue with a correlation matrix that arises when a single independent variable is too highly correlated with other independent construct. The assessment of multi-collinearity can be conducted through examining the variance influence factor (VIF). The cut-off point for VIF is less than 3. Also, as a rule of thumb, according to Cohen and Cohen, (1983) when tolerance is below .20, it signifies an issue with multi-collinearity. Hence, the results in below Table 4.22, using collinearity diagnostics, show that multi-collinearity is negligible in this study, further supporting the evidence from earlier correlation analysis.

Table 4.22
Summary of multi-collinearity of all dimensions of IVs retained after FA

IV in Dependent list	IVs in Independent list	Tolerance	VIF
EO_I_C	EO_RT_C	.716	1.397
	EO_P_C	.710	1.408
	EV_EC	.973	1.028
	KCP_SE_C	.928	1.078
	KCP_CI_C	.929	1.076

EO_P_C	EO_I_C	.931	1.074
	EO_RT_C	.919	1.088
	EV_EC	.954	1.048
	KCP_SE_C	.975	1.026
	KCP_CI_C	.984	1.016
EO_RT_C	EO_I_C	.963	1.038
	EO_P_C	.944	1.060
	EV_EC	.961	1.040
	KCP_SE_C	.971	1.030
	KCP_CI_C	.968	1.033
EV_EC	EO_I_C	.949	1.054
	EO_P_C	.710	1.408
	EO_RT_C	.697	1.435
	KCP_SE_C	.932	1.073
	KCP_CI_C	.933	1.072
KCP_SE_C	EO_I_C	.931	1.074
	EO_P_C	.747	1.339
	EO_RT_C	.724	1.380
	EV_EC	.959	1.043
	KCP_CI_C	.928	1.077
KCP_CI_C	EO_I_C	.932	1.073
	EO_P_C	.753	1.328
	EO_RT_C	.721	1.386
	EV_EC	.958	1.043
	KCP_SE_C	.927	1.078

4.4 Hypotheses Testing

Sekaran, (2006) regards the multiple regressions as a comprehension test on how much the dependent variable is explained by the independent variables when hypothesized to influence simultaneously the former. As stated earlier, before this hypothesis testing, tests regarding the four assumptions of multiple regressions (normality, linearity, homoscedasticity and independence of residual) were carried out and met the

requirements. In this study, entrepreneurial orientation, entrepreneurial values and knowledge creation process are the three independent variables that could predict the performance of SMEs. These three variables were hypothesized to have significant relationships between the performances of SMEs. To predict this relationship, the following linear and multiple regression analysis using SPSS 19.0 were performed.

4.4.1 Relationship between owner/managers' Entrepreneurial Orientation and Performance of SMEs

Research question 1: What is the relationship between Entrepreneurial orientation EO and the performance of SMEs?

To answer the research question, the original single hypothesis H1 has been reformulated as three hypotheses H1a, H1b and H1c due to three factors structure (multidimensionality) in the factor analysis, shown in earlier section 4.3.7 b (all IVs together). That is :--

Hypothesis H1a: There is significant relationship between innovativeness of EO and the performance of SMEs.

Hypothesis H1b: There is significant relationship between pro-activeness of EO and the performance of SMEs.

Hypothesis H1c: There is significant relationship between risk-taking of EO and the performance of SMEs.

A multiple regression was performed to check any influence between owner/managers' multidimensional entrepreneurial orientation (innovativeness, proactiveness and risk-

taking) and performance of SMEs. Table 4.23 below shows the result of the analysis. From the multiple regression test result, the researcher found R^2 value at .552 which means the entrepreneurial orientation independent variable explained 55.2 percent of the variance in the performance of SMEs dependent variable. Using rule-of-thumb (R^2=0.01=small, 0.05=medium, 0.25=large) propose by Cohen (1992), this strength can be regarded as very large.

The t value of EO_innovativeness dimension was at 2.042 with probability p-value .042 (less than .05). Thus, H1a is supported; there is a significant relationship between EO_innovativeness dimension and performance of SMEs.

The t value of EO_proactiveness dimension was at 2.136 with probability p-value .033 (less than .05). Thus, H1b is also supported; there is a significant relationship between EO_ proactiveness dimension and performance of SMEs.

The t value of EO_risk-taking dimension was at 16.084 with probability p-value .000 (less than .05). Thus, H1c is also supported; there is a significant relationship between EO_ risk-taking dimension and performance of SMEs.

In short, this independent variable entrepreneurial orientation has positive influence on performance of SMEs, with its dimension EO_ risk-taking being the highest strength followed by EO_proactiveness and EO_innovativeness. Moreover, it can be deduced that the more the SMEs owner/managers adopt the entrepreneurial orientation in their firms the higher their firm performance is experienced. The strength of the relationship is

measured by its positive β which is ranging from .077 to .678, meaning that dimension EO_ risk-taking is relatively the strongest and crucial predictor of performance of SMEs.

Table 4.23
Influence of Dimensions of EO on Firm Performance

Dimensions of Independent Variable	**R^2**	**t**	**Standardized coefficient Beta (β)**	**Sig.**
EO_Innovativeness	.552	2.042	.077	.042
EO_Proactiveness		2.136	.088	.033
EO_RiskTaking		16.084	.678	.000

As all three Hypotheses H1a, H1b and H1c are accepted, hence they also answer the research question No.1 in section 1.3: "What is the relationship between Entrepreneurial orientation EO and the performance of SMEs?"

4.4.2 Relationship between owner/managers' Entrepreneurial Values and Performance of SMEs

Research question 2: What is the relationship between entrepreneurial values EV and the performance of SMEs?

To answer the research question, one hypothesis H2 was formulated, as proven by single factor structure (unidimensionality) in the factor analysis, shown in earlier section 4.3.7.b (all IVs together). That is :--

Hypothesis H2: There is significant relationship between entrepreneurial values EO and the performance of SMEs.

A standard linear regression was performed to check any influence between owner/managers' entrepreneurial values and performance of SMEs. Table 4.24 below

shows the result of the analysis. From the linear regression test result, the researcher found R^2 value at .021 which means the entrepreneurial values independent variable explained only 2.1 percent of the variance in the performance of SMEs dependent variable. Using rule-of-thumb (R^2=0.01=small, 0.05=medium, 0.25=large) propose by Cohen (1992), this strength can be regarded as small.

The t value of EV _effective composite variable was at 2.691 with probability p-value .007 (less than .05). Thus, H2 is supported; there is a significant relationship between EV and performance of SMEs.

Table 4.24
Influence of EV on Firm Performance

Independent Variable	**R^2**	**t**	**Standardized coefficient Beta (β)**	**Sig.**
EV_Effective Composite	.021	2.691	.146	.007

Note: EV_Effective Composite refers to composite variable of EV from the retained 12 (out of 15) items after FA.

In short, this independent variable entrepreneurial value has positive influence on performance of SMEs. Moreover, it can be deduced that the more the SMEs owner/managers adopt the entrepreneurial values in their firms the higher their firm performance is experienced. The strength of the relationship is measured by its positive β which is .146, meaning that EV is a mild predictor of performance of SMEs.

Since Hypothesis H2 is accepted, it also answers the research question 2 is in section 1.3: "What is the relationship between Entrepreneurial values EV and the performance of SMEs?"

4.4.3 Relationship between owner/managers' Knowledge Creation Process and Performance of SMEs

Research question 3: What is the relationship between knowledge creation process KCP and the performance of SMEs?

To answer the research question, the original single hypothesis has been reformulated as two hypotheses H3a and H3b due to two factors structure (multidimensionality) after factor analysis, shown in earlier section 4.3.7.b (all IVs together). That is :--

Hypothesis H3a: There is significant relationship between socialization-cum-externalization of KCP and the performance of SMEs.

Hypothesis H3b: There is significant relationship between combination-cum-internalization of KCP and the performance of SMEs.

A multiple regression was performed to check any influence between owner/managers' dual dimensional knowledge creation process (socialization-cum-externalization and combination-cum-internalization) and performance of SMEs. Table 4.25 below shows the result of the analysis. From the multiple regression test result, the researcher found R^2 value at .031 which means the KCP independent variable explained only 3.1percent of the variance in the performance of SMEs dependent variable. Using rule-of-thumb (R^2=0.01=small, 0.05=medium, 0.25=large) propose by Cohen (1992), this strength can be regarded as small.

The t value of socialization-cum-externalization dimension was at 2.193 with probability p-value .029 (less than .05). Thus, H3a is supported; there is a significant

relationship between socialization-cum-externalization dimension of KCP and performance of SMEs.

The t value of combination-cum-internalization dimension was at 2.328 with probability p-value .021 (less than .05). Thus, H3b is also supported; there is a significant relationship between combination-cum-internalization dimension of KCP and performance of SMEs.

Table 4.25
Influence of KCP dimensions on Firm Performance

Dimensions of KCP Independent Variable	**R^2**	**t**	**Standardized coefficient Beta (β)**	**Sig.**
KCP_Socialization cum Externalization	.031	2.193	.119	.029
KCP_Combination cum Internalization		2.328	.126	.021

Note: Both dimensions are effective composite variables which refer to composite variables of KCP from the retained 13 (out of 16) items after FA.

In short, this independent variable KCP has positive influence on performance of SMEs, with both its dimensions being the similar strength. Furthermore, it can be deduced that the more the SMEs owner/managers adopt the KCP in their firms the higher their firm performance is experienced. The strength of the relationship is measured by its positive β which is ranging from .119 to .126, meaning that both dimensions of KCP are mild predictor of performance of SMEs.

As both Hypothesis H3a and H3b are accepted hence they also answer the research question 3 is in section 1.3: "What is the relationship between Knowledge creation process KCP and the performance of SMEs?"

4.4.4 Summary of Hypotheses testing

Overall there were six hypotheses tested in the research, the results and findings were discussed in the previous sections. Table 4.26 below shows a summary of the results of hypotheses tested in the study.

Table 4.26
Summary of hypotheses testingand results

No	Hypothesis	Results
1	H1a: There is significant relationship between innovativeness of EO and the performance of SMEs.	Accepted
2	H1b: There is significant relationship between pro-activeness of EO and the performance of SMEs .	Accepted
3	H1c: There is significant relationship between risk-taking of EO and the performance of SMEs .	Accepted
4	H2: There is significant relationship between entrepreneurial values EV and the performance of SMEs .	Accepted
5	H3a: There is significant relationship between socialization-cum-externalization of KCP and the performance of SMEs .	Accepted
6	H3b: There is significant relationship between combination-cum-internalization of KCP and the performance of SMEs	Accepted

4.5 Chapter Summary

This chapter first exhibited the data collection and how the response rate was attained. Next, respondent firm profiles were discussed, followed by descriptive analysis, assumptions of multiple regressions, factor analysis, correlation, linear regression and multiple regression analysis. The result disclosed that the direct relationship between the independent variables and dependent variable were all significant. The findings of this chapter will be further discussed in detail in Chapter Five.

CHAPTER FIVE : DISCUSSION AND CONCLUSION

5.1 Introduction

This final chapter discusses the findings that have been presented in Chapter 4. First the demographic profiles of the respondents will be briefly reviewed. Then, the descriptive analysis on the relationship between strategic entrepreneurship and performance of SMEs are presented. Later, the results of simple and multiple regressions pertaining to each of the three research hypotheses that were tested in this study are examined. The chapter ends with the implications of the study and the recommendations for future research based on the findings.

5.2 Characteristics of the Respondents

From the findings, it shows that around 80 percent of the types of SMEs in Malaysia are involved in Services and Manufacturing sectors. The rest which is merely 20 percent are from Construction and others. This concurs with the information in Economic Census 2011. (Please note that the sector Manufacturing Related Services classified in NSDC, 2005 is merged into Services in NSDC, 2013 SMEs definition). These results can be understood that larger enterprises and MNC in Malaysia are mostly comprised of the similar categories of businesses that need the supports from these smaller SMEs.

The results of this research exposed that about 83 percent of the SMEs had less than 50 employees. Only 63 (17 percent) out of 370 SMEs had 51 and up to 200 staff employed. This concurs with the information revealed in Economic Census, 2011 that majority (see Table 2.3) of the SME establishment are of the size of micro and small enterprises. This

finding may also be deduced that the size of SMEs in Malaysia in terms of the number of employees is relatively small as most SMEs operations nowadays are assisted by affordable automation, cheaper e-commerce, computer networks and applications which demands less staff. However, this does not concur with the information of ICT usage in Economic Census 2011, which talks about utilizing internet in their business and having their own web-sites.

Coincidently, it also revealed that around 83 percent of the SMEs have invested less than RM200,000 in capital. Only 17 percent invested more than RM200,000 but less than RM1 million. SMEs in Malaysia are mostly owned by individuals, family members or partnership, that are usually begin with start-up with limited capital. They usually get their source of capital from their own financing internally. This concurs with the Economic Census 2011 on SMEs access to financing which revealed that for micro and small-sized companies, they are mostly get their financing from their own internally-generated funds. Moreover, SMEs mostly (86.6 percent) do not carry out any promotion in selling or marketing their products and/or services (Economic Census, 2011).

The study also reveals that most of the SMEs, around 80 percent, achieved annual sales turnover less than RM1million. The remaining 20 percent falls into the range from RM1million up to 25million and 50million. This is somehow related to the amount of the capital invested, the size of their workforce employed. These two factors determined the amount of business capacity could be handled by the SMEs. This concurs with the fact that majority of the SMEs in this study are from microenterprises and small-sized firms which have annual sales turnover of similar range.

Around 73 percent of the SMEs of the survey samples are established in operation less than 15 years. Out of this, mostly are less than 10 years (53 percent). This is relatively young as compared with the large enterprises. This is tally with size of SMEs in this study, which comprises of mostly microenterprises and small-sized companies.

Around 83.8 percent of the SMEs of the survey samples are at starting, surviving and growing stage. This is rather encouraging since only 2.4 percent are in declining stage. The remaining 14.1 percent are in maturing stage which means they might be later on 'promoted' into the large enterprises category. That reveals also one of the reasons why new definition of SMEs are necessary (NSDC, 2013) to recognize more companies into SMEs, especially from the services sector. This is to allow more companies to enjoy the support programmes by the government via the initiatives under the Malaysian SME Master plan (SMECorp Malaysia, 2013).

5.3 Descriptive Analysis

Following are the descriptive analysis and discussion on the sets of variable items within the three IVs.

5.3.1 Discussion on variable items in EO

The mean score of 4.54 for entrepreneurial orientation (EO_C in Table 4.11) indicates that the SMEs in Malaysia were entrepreneurially oriented. Since all items are retained after FA, the item 'extent of changes in products or services' (EO2b in Table 4.12) scored the highest mean value of 4.68, followed by 'in

uncertainty, cautious or aggressive' (EO6 in Table 4.12) with a mean value of 4.66. These findings are anticipated for SMEs to be very responsive to environmental challenges such that they must "quite dramatically" keep initiating novel products and services by having creative or innovative design, strategies and ways of manufacturing. The findings may also be elucidated by the highly uncertain and volatile nature of the SMEs environment that might have influenced owners'/managers' behaviour to be bold and aggressive in decision-making. This coincides with those studies which in general advocated the evidence that entrepreneurial organizations such as SMEs who are innovative and aggressive excel in dynamic and uncertain environment (Wiklund, 1999; Zahra & Covin, 1995; McDougall, Shane & Oviat, 1994). EO is also viewed as a critical means to sustaining growth and strategic rejuvenation, a strategy especially valuable in hostile and dynamic business environment (Guth & Ginsberg, 1990).

Several studies have showed that the dimensions of EO, which can enhance a firm's adaptability and flexibility in dynamic environment, are imperative elements to the firm performance (Wiklund & Shepherd, 2003, 2005; Zahra & Garvis, 2000; Barrett & Weinstein, 1998; Lumpkin & Dess, 1996; Zahra & Covin, 1995; Covin & Slevin, 1991) and leading towards growth's rate of market (Ireland et al., 2003; Shane & Venkataraman, 2000). The three dimensions are; innovativeness, proactiveness, and risk-takings as necessary antecedents to goal achievement (Mahmood & Hanafi, 2013; Ahmad & Ghani, 2010; Zahra, Nielson & Bogner, 1999; Covin & Miles, 1999). Based on high mean scores exhibited in

Table 4.21, SMEs owners'/managers in this research may have focused on these three EO dimensions to protect their organizations against hostile environmental dynamics or to explore new opportunities and exploit existing opportunities.

5.3.2 Discussion on variable items in EV

The mean score of 4.27 for effective composite entrepreneurial values (EV_EC in Table 4.21) indicates that the SMEs in Malaysia were looking highly on entrepreneurial values or cultures. From the retained items after FA (i.e. item EV1, EV3 and EV6 were deleted), the remained item 'I do not want to expand my business because of my exhaustion' (EV8 in Table 4.13) scored the highest mean value of 4.45, followed by 'I can do this kind of business because I have skills/knowledge/experience' (EV10 in Table 4.13) and 'I can run the business because I have learned through family experience in business' (EV12 in Table 4.13) with a mean value of about 4.39. The findings of the value of "feel exhausted" item EV8 concur with several studies by Gill, 1985; Chell, Haworth and Brearly, 1991; Ginn and Sexton, 1989; Segal, Quince and Partners, 1985. The limitation on the business growth performance may mentally bring upon from a shortage of self-confidence or afraid of losing for the entrepreneur in elevating the business (Gill, 1985). Some entrepreneurs were worried of becoming a victim of their business growth and this trend has caused them reluctant to progress further from their businesses (Birley & Muzyka, 1997). The findings of the value of "business skills" item EV10 concur with several studies by Holmes and Nicholls, 1988 and Thong, 1999 while "family experience" EV12 concur with studies by

Ellis, 1965 and Huber, 1991. These strong entrepreneur's values can bring about synergy elevating the growth performance of SMEs.

5.3.3 Discussion on variable items in KCP

The effective composite mean score of KCP_SE_C = 4.3740 and KCP_CI_C = 4.4584 in Table 4.21, indicate that the SMEs in Malaysia were emphasizing on knowledge creation process. From the retained items after FA (i.e. item KCP4 and KCP5 were deleted), the remained item "My firm usually uses databases" and "My firm usually adopts on-the-job training" (KCP12 and KCP14 respectively in Table 4.14) scored the highest mean value of 4.55. This high mean value of KCP12 and KCP14 which are within the dimension C and I respectively of KCP's SECI, concur with the findings by Li, Huang, and Tsai, (2009) on firms in Taiwan. Thus, based on high mean scores of KCP_CI_C exhibited in Table 4.21, SMEs owners'/managers in this research may have focused on combination process in creating novel knowledge via those knowledge already exists and spawn novel knowledge application for exploitation (Nonaka, Toyama & Nagata, 2000). And via internalization, knowledge is converted into firm's database and is realized in production process or new product development (NPD) (Nonaka, Toyama & Konno, 2000).

5.4 Hypotheses Results

Following are the discussion on the hypotheses results. Hypotheses were performed to answer the research questions and research objectives of this study.

5.4.1 Discussion of the Hypothesis H1 results

Hypothesis H1: There is significant relationship between EO and the performance of SMEs.

The original single hypothesis H1 above has been reformulated as three hypotheses H1a, H1b and H1c due to three factors structure in factor analysis shown in Chapter 4 Table 4.18.

Hypothesis H1a: There is significant relationship between innovativeness and the performance of SMEs.

Hypothesis H1b: There is significant relationship between pro-activeness and the performance of SMEs.

Hypothesis H1c: There is significant relationship between risk-taking and the performance of SMEs.

Thus the hypotheses of this study were reformulated to examine the relationship between innovativeness, proactiveness and risk-taking of EO with performance of SME firms in Malaysia. The result of this study in Table 4.23 concur with similar empirical evidence of previous study findings by Krauss, Frese, Friedrich, and Unger, (2005); Wiklund and Shepherd, (2005); Yang, (2006); Ahmad and Ghani, (2010), that all three dimensions of

entrepreneurial orientation (innovativeness, proactiveness and risk-taking) have significant positive relationship with performance of SMEs. The results in Table 4.23 also revealed that the risk-taking dimension makes the highest distinctive contribution to the performance of SME ($\beta = .678$), then followed by the proactiveness dimension ($\beta = .088$) and the innovativeness dimension ($\beta = .077$). The contribution of risk-taking in this study is somewhat exceptional as findings from previous studies usually indicate that this dimension of EO only contributed to small level of relationship. For instance, the researches by Covin, Green and Slevin (2006); Yang (2006); Ahmad and Ghani, (2010), demonstrated small or least level of significant positive relationship among the three dimensions of EO. As such, it is very likely that SME firms in Malaysia recognize the growing importance of the risk-taking element in the hostile, dynamic and highly volatile of today business environment. This suggestion concurs with previous study which posited that risk-taking is incorporated in the decision making of a firm (Coulthard, 2007). The risks were planned and executed deliver affirmative gains for instance the successful performance of the SME firm (Coulthard, 2007).

In short, the result of this study showed that the entrepreneurial orientation EO is significantly positive influenced the performance of SMEs in Malaysia. That is, to enhance performance of SME, firms in Malaysia should perform more risk-taking diligently, proactively in quest of opportunities and take innovativeness seriously in actions (Norita et al, 2007; Lumpkin & Dess, 1996).

5.4.2 Discussion of the Hypothesis H2 results

Hypothesis H2: There is significant relationship between entrepreneurial values and the performance of SMEs.

The hypothesis H2 was maintained, as proven by unidimensional or single factor structure in factor analysis shown in Chapter 4 Table 4.18.

The result of this study in Table 4.24 concur with similar empirical evidence of previous study findings by Peou, (2009); Herri, (2003); Hashim and Abdullah, (2000); Gorton, (1999); Ismail, (1998); McMahon, (2001); Penrose, (1995); that there is positive relationship between entrepreneurial value and the growth performance of SMEs. The results in Table 4.24 revealed that R^2 value of .021 means it explained a small 2.1 percent (Cohen, 1992) of the variance in the performance of SMEs dependent variable as compared to EO which has a very large R^2 value of .552 (or 55.2 percent) (Cohen, 1992). Also the strength of the relationship (β = .146) shows that EV is a mild predictor of performance of SMEs in Malaysia. Perhaps, with limited resources, in the choice of exploration activities in today hostile and volatile business environment, SMEs owners/managers in Malaysia prefer EO than EV to influence their business performance. Nevertheless, the present research confirmed the influence of entrepreneurial value to the performance of SMEs in Malaysia. Entrepreneurial value factor was evaluated so as to explore the owner/manager's behaviour pertaining to their belief of job creation, need of achievement, belief of hard work, belief of success, belief of creativity and innovativeness, belief on locus of control, and belief of learning from others, etc (Gorton, 1999; Hashim & Abdullah, 2000). Based on this study and many previous surveys, the researcher

believes that the enhancement of these factors will contribute to the performance of SMEs in Malaysia.

5.4.3 Discussion of the Hypothesis H3 results

Hypothesis H3: There is significant relationship between KCP and the performance of SMEs.

The original single hypothesis H3 above has been reformulated as two hypotheses H3a and H3b due to two factors structure in factor analysis shown in Chapter 4 Table 4.18.

Hypothesis H3a: There is significant relationship between socialization-cum-externalization of KCP and the performance of SMEs.

Hypothesis H3b: There is significant relationship between combination-cum-internalization of KCP and the performance of SMEs.

Thus the hypotheses of this study were reformulated to examine the relationship between socialization-cum-externalization (SE) and combination-cum-internalization (CI) of KCP with the performance of SME firms in Malaysia. The result of this study in Table 4.25 concur with similar empirical evidence of previous study findings by Li, Huang, and Tsai, (2009); Soon and Zainol, (2011) that dimensions of KCP (SECI) have significant positive relationship with performance of SMEs. The results in Table 4.25 also revealed that the CI dimension make a mild contribution to the performance of SME (β = .126), then followed by the SE dimension (β = .119). The contribution of the dimensions in this study (R^2 = .031) is small (Cohen, 1992) and somewhat dissimilar as

findings from previous studies usually indicate that dimension of KCP (i.e. SECI) contributed to substantial level of relationship. Perhaps, this study is somehow different from previous studies where dimensions of KCP were treated not directly to the firm performance only. For instance, in the study by Li, Huang, and Tsai, (2009), KCP was a mediator between EO and firm performance whereas in the study by Soon and Zainol, (2011), organizational creativity was a mediator between KCP and the organizational performance.

Nevertheless, in this study there is a significantly positive relationship between dimensions SE and CI of KCP and performance of SMEs in Malaysia. Thus, hypotheses H3a and H3b are accepted. The finding of this study might increase the comprehension where each KCP is certainly required and might be having relation with performance, thereby corroborates to the concept of KCP on the performance of an organization (Soon & Zainol, 2011; Li et al., 2009).

In short, the result of this study showed that the KCP is significantly positive influenced the performance of SMEs in Malaysia. Undeniably the entire organizational knowledge creation process is essential as this relays to "the capability of a company as a whole to create new knowledge, disseminate it throughout the organization, and embody it in products, services, and systems" (Nonaka & Takeuchi, 1995, p. 3). This facilitates the "knowledge creating" SME firm to accomplish continuous innovation (Nonaka, 1991, p. 96). That is, to enhance performance of SME, firms in Malaysia should perform exploitation activities such as KCP in their organization (Soon & Zainol, 2011; Li et al.,

2009; Chia, 2003; Kogut & Zander, 2003; Gold et al., 2001; Matusik & Hill, 1998; Nonaka & Takeuchi, 1995).

As mentioned earlier, the idea of strategic entrepreneurship is relatively novel such that its framework and the associate constructs are still explorative in nature. According to Hooper, Coughlan and Mullen (2008), the finding of poor fit of such suggested model or weak model fit of such framework, is quite common. As such, to exercise correct approach, it is preferable to do the assessment of each construct fit instead of the model fit, and the associated items can be investigate individually for any especially weak item (Hooper et al., 2008). With that reason, this study employs regression and hypothesis testings of each individual IV only, rather than the whole model fit analysis.

5.5 Contributions of the Study

In spite of the prevalent belief that SE improves firm performance, there is very little theoretical work by the researcher on the development of relationships among dimensions of SE on firm performance, let alone systematic empirical analysis to assess the relationships. This can be regarded as the maiden research that combined the dimensions of EO, EV and KCP on firm performance, and analyzed them empirically. This research gives deeper understanding to the SE factors that influence performance of SME's, and examined the relationships among the variables. Thus, the main contribution of this study is on stressing and putting together the main underpinning theory of resource base view (Penrose, 1959; Wernerfelt, 1984) with other supporting theories such as entrepreneur behavior theory (Schumpeter, 1934), entrepreneurship theory (Schumpeter, 1934; McClelland, 1961; Hitt et al., 2001), resource-advantage theory in knowledge (Hunt, 1995;

Grant, 1996) and the firm performance theory (Murphy et al. 1996). This study has provided evident that the EO, EV and KCP as the influence factors of SE to the performance of SMEs are pertinent, convincing and appropriate in Malaysia context. From the research questions and objectives of this study, it is known that that there is no intention to test or regress the SE as model fit. However, the researcher discovered that exploration (EO + EV), exploitation (KCP) and even the combined effect of strategic entrepreneurship (exploration + exploitation) were still significant in model fit tests.

5.5.1 Theoretical contribution

In researcher opinion, the findings of this study help in a few theoretical contribution. To begin with, Lumpkin and Dess, (1996) suggested although the significance of entrepreneurial orientation to performance of SMEs is being acknowledged, but relationship of entrepreneurial orientation with company performance is still unpredictable in nature. However, this findings of this study discloses that entrepreneurial orientation especially its dimension risk-taking is very vital to business undertakings and has significant positive influence on the firm performance, have gave another extra testimonials on the positive impact of entrepreneurial orientation on firm performance (Wiklund & Shepherd, 2003; Lumpkin & Dess, 2001; Barringer & Bluedorn, 1999; Zahra & Covin, 1995).

Secondly, albeit the contribution and strength are rather minor in this study, the findings anyway support the entrepreneur behavior theory in that, it is becoming obvious an economic model must be conceptualized to illustrate the role of entrepreneurial value play in a successful SMEs' development in Malaysia.

Thirdly, Nonaka's (1994) theory of knowledge creation gets another empirical support from the emergent SE model in this study. Even though the contribution and strength of KCP to firm performance are not as big as EO, the findings of this study anyway illustrated the positive significant influence of knowledge creation process on the performance of SMEs in Malaysia. In this study, the researcher is mainly stressing on the dynamic processes of knowledge creation instead of its end-results (Nonaka, 1994; Nonaka & Konno, 1998; Nonaka, Toyama & Nagata, 2000). That is the interactive spiral process of socialization, externalization, combination, and internalization or SECI in short, joined and transformed the tacit and explicit knowledge in KCP. This dynamic SECI model allows the firm to generate new knowledge or combine on hand knowledge to construct new insights and turn into valuable resource in knowledge ready for the exploitation by the firms. New business undertaking can strengthen the dynamic flow of knowledge and activate new spirals of knowledge creation continuously to convert into enhanced value in firm performance. In addition, this proposition of KCP in exploitation model in this study relayed an associated support for the resource-advantage theory (Grant, 1996; Hunt, 1995). Base on the resource-advantage theory, internally embedded knowledge is a valuable asset as it is "unique in nature and difficult to imitate" (Barney, 1991; Grant, 1996; Hunt & Morgan, 1996; Zack, 1999). The findings expose that KCP converts tacit knowledge into the organizational database and thus helps to enhance firm performance in efficiency, growth, and profit (Nonaka & Takeuchi, 1995; Murphy et al. 1996). The findings of this study join other researches to support the premeditated importance of knowledge creation to achieve SCA or sustaining competitive advantages

(Chia, 2003; Lee & Choi, 2003; Matusik & Hill, 1998; Grant, 1996; Nonaka & Takeuchi, 1995).

Fourthly, this study contributes in combining the domains of entrepreneurial orientation, entrepreneurial values and knowledge management research in the study of the relationship between strategic entrepreneurship and firm performance. Literature in entrepreneurship (Lee et al., 2001; Shane & Venkataraman, 2000; Lumpkin & Dess, 1996) regards EO and values of novel ventures are significant to the success as EO signifies a vital measure to "discover and exploit profitable business opportunities" and entrepreneurial values favouring exploration will be "continuously progressing, innovating and seeking new opportunities to increase profits and sustain growth". Knowledge management literature (Grant, 1996; Zack, 1999; Nonaka, Toyama & Nagata, 2000; Nonaka, Toyama & Konno, 2000) highlights the "importance of leveraging knowledge and creating novel combinations". This study illustrated that the KCP seems to be a key exploitation means to achieve desirable firm performance.

Finally, resource based view has hardly ever been used in direct empirical analysis, especially with resource and knowledge based resources on the central of analysis. This study extended the resource base view (RBV) theory by investigating, discovering and testing the impact of those resources that are most important in the performance of SMEs. All the dimensions of the EO, EV and KCP displayed a significant positive influence on performance SMEs in Malaysia. Thus, the findings give significant support for a resource and knowledge based explanation on firm performances.

5.5.2 Managerial contribution

The findings of this study have presented important managerial implication and contribution to studies on entrepreneurial orientation of SME firms in Malaysia. The top management of SME firms must make sure that all three elements (innovativeness, proactiveness and risk-taking) of EO are performed in the firms, paying particularly attention to the risk-taking dimension. Wiklund and Shepherd, (2005) suggested that targeting solely on any one element only will deter entrepreneurs to compete and enhance their firm performance. In order to get the SMEs firm ready for the implementation of the elements, the government and its agency should render essential support and consultative services to them.

On the other hand, the current study of entrepreneurial values EV ascertain that in a SME firm, owner/managers who are trained and skilled have ability to enhance quality and speed up the processes. Enhanced quality could relate to better firm performance. To have skilled owner/managers participate in setting means and goals can push for more commitment from them in speeding up the processes to realize the profit and firm performance. The growth performance of SMEs depends on the ability of an entrepreneur to allocate the strategic limited resources and adapt to changes by setting up proper firm orientation. Successful processes will only be achievable if sufficiently skilled and motivated employees are equipped with precise and current information. To facilitate dynamic requirements, employees may be required to engage dramatically new responsibilities which may involve new skills and capabilities (Robinson, 1982; Hashim, 2000).

In practical and managerial contribution, this study proposes owner/managers must be receptive towards significance of KCP to company performance. Owner/managers should make possible the dynamicity and spirally nature in knowledge-creation by acting as the central character in managing the SECI process. Firms can intensify and expand knowledge via the dynamic transformation between tacit and explicit knowledge. Owner/managers are required to cultivate an enabling environment that permits employees to share and exchange tacit knowledge to generate novel knowledge. Every form of knowledge transformation needs dissimilar ways in creating knowledge as well as distributed efficiently (Nonaka & Konno, 1998; Nonaka, Toyama & Konno, 2000). Take for instance, in socialization process of SECI, employees depend on shared-experiences in apprenticeship or training to bolster common comprehension and mutual trust. Within externalization, metaphors employed inside dialogue are instrumental to generate ideas. Combination process could propagate knowledge efficiently via engaging information technologies in database, groupware, online network or social network. Finally in internalization process, new knowledge is expressed and materialized via simulations or experiments. Hence, to facilitate knowledge creation, managers ought to cautiously select and devise suitable routines based on the SECI process. In addition, firms are required to boost employees' interest and involvement in SECI operations. This can be achieved via owner/managers' initiative to give supports and incentives in strengthening the favourable behaviour within knowledge creation. In this way, workers would be in motivation for exchanging, learning, and generating new knowledge and then convert knowledge for achieving strategic goals. In Malaysia, SMEs are usually owned by individuals or dealing with family business. Their firm is normally less formal and lacking rigid organizational

structures. Thus communications among individuals in the same or different departments is considered dynamic and efficient, particularly since it is very common for employees to be multi-tasking across different levels and departments. Owing to the everyday interaction, it is evident that such employees in SMEs are able to exchange, learn and transfer knowledge efficiently and quickly. Thus the potential for knowledge creation on this basis of such multi-tasking skills in Malaysian SMEs is undeniable obvious. Another factor related to knowledge creation in Malaysia, is the growth of internet technology. This has facilitated the fast expansion of organizational phenomenon such as social networking sites, forums and groups founded on community of related interest and practice. With this it is not difficult to envisage the significance of their potential role in informal learning and thus the knowledge creation process in the context of Malaysian SMEs.

5.6 Limitations of the Study

Several inherent limitations were identified in this study. First, it is the issue of the cross-sectional data collection. As the data were collected at a single point in time, it does not allow the influence of changes over time and thus prevent the finding of the cause and effect (Creswell, 2003; Zikmund, 2003). The analysis was derived from the assumption that a set of independent variables is predicting the outcome in dependent variable. However, this application of a multivariate analysis to set up a predictive trend in this study does not able to predict the causal relationships among variables (Brewerton & Millward, 2004). A longitudinal study would permit the SME to be analysed over time, and provide a better depiction on its performances. A longitudinal study would give

additional details into the dynamic characteristic of EO, EV and KCP at diverse organizational levels and depict causal inferences of the model. This study does not go extra in probing a known mediator like KCP in the relationship between EO and firm performance (Li et al., 2009). This study also does not mull over the influences by organizational cultures, routines (Wang, Su & Yang, 2011), other knowledge management processes like knowledge integration (Argote, McEvily & Reagans, 2003) and the impact of changes in the dynamic business environment.

This research depended solely on self reports for all the variables. However, self-reported data prone to be incurring the chances of positively or common method bias and thus may not always be totally honest in response (Zikmund & Babin, 2007). The reason is the respondents may have reserved on articulating unfavoured or negative views on their firm and thus replied in a socially favourable approach. Thus though self-report data are a sensible and reasonable means of data collection, they may not be exact manifestations of truth. Also since there are no secondary sources, there is no way to verify the accuracy of data. Nevertheless, to address this concern, apart from counter-biasing statement being employed, persuading all respondents to join in the survey and pledging them of anonymity and confidentiality which may help to eliminate some desire to 'lie' about actual situation. Furthermore, the researcher also uses multiple assessments including reliability (Cronbach alphas) and validity tests to maintain the accuracy of the data and results. Another limitation related to this is that the researcher understands that most likely company's orientation will resemble to that of top manager. Thus, on cases like top manager being replaced, views on EO, EV, KCP and firm performance may be affected.

Next is the limitation in the employment of subjective measures to find out the firm performance. The most excellent measurement of firm performance is always via objective means, but "subjective perceptions of performance correlated well with objective measures" (Dess & Robinson, 1984). Furthermore, more often than not objective measures are not available, thus subjective judgement could be very useful indeed.

Albeit all the hypotheses tested in the study were positive, no effort was spend to gauge the potential inter-relationships among the variables and thus the relative significance of the variables in the model. The EO, EV and KCP are definitely related to the performance of SMEs in Malaysia. However, based on this study alone, it is not possible to comment anything additional in this analysis.

5.7 Suggestions for Future Research

As highlighted at the limitation of this study, a longitudinal research design may be most appropriate for the studying the effect of strategic entrepreneurship on performance of SMEs in Malaysia. It would also permit the SME firms to be studied over time and provide a clearer and actual representation of the relationship between variables. Acquiring and researching data over time would most probably generate conclusions derived from possible causation instead of association. Also, a longitudinal research would be able to capture the influence of variations in the dynamic SME environment and the consequences of adaptation of managerial strategy. This is especially true when comes to study of combine effect of strategic entrepreneurship multidimensional elements on the firm performance (Sokolova, 2011).

As per suggestion by Lumpkin and Dess (1996) in academic standpoint, future research should consider two more variables that are autonomy and competitive aggressiveness in the construct of EO. This is to observe the influence of these two variables on the performance of a SME firm. Future research should also consider firm performance measurement through multi-dimension method (Kreiser, Marino & Weaver, 2002). For example, measurement could be performed by investigative distinctive contribution between independent variables with dimension of firm performance in efficiency, growth and profitability separately (Murphy et al., 1996; Wiklund & Shepherd, 2005). In addition, researchers are suggested to look into the moderating effect of environmental factors when studying the theme of firm performance (Kreiser et al, 2002). This future study will allow probing into the moderator like government policy in Malaysia that support firm performance, plus the way in which these factors interrelate with the sub dimensions of IVs. Thus, researchers should be aware of the probable environmental impacts when constructing models to evaluate strategic entrepreneurship and firm performance.

In the context of multiethnic and cultural characteristic in Malaysia, the option to embrace ethnic or cultural factor should be considered as it certainly will have influence on the performance of SMEs. Future researches may achieve further insights with the consideration of latent mediators like organization structure or culture and even the replacement in top manager. Also, company's age of this research is rather bounded since the respondents are from SMEs only. Since larger firms prone to have adequate resources and capacity to invest and better control in certain variables like KCP, future scope of research could extend to bigger and elder firms instead of SME only. As mentioned in the

limitation of this study, future research should considered KCP as a mediator in the relationship between EO and firm performance (Li et al., 2009). This is to compare with the results exhibited in this study where there were only small contribution and weak influence of KCP directly on the firm performance. Similarly KCP can be explored having a mediator like organizational creativity prior influence on the firm performance (Soon & Zainol, 2011).

As this study used quantitative research methodology, the only instrument employed to collect data was survey questionnaire. Despite the Cronbach's alpha test, it is not possible to have the quality of data collected 100 percent definitely reliable as it relied solely on the respondent's in depth comprehension and attention to the questionnaire in providing their response. Thus to elicit oral depictions of features, cases, and the situation through elaborated interviews, future research should also use qualitative means in parallel. As qualitative research usually engages lesser cases analysed in more detail than quantitative method, it would also give a more insights of the dynamic, interactive and complex relationships among variables in certain perspectives. As such, this method could expand additional comprehensions into the implementation of strategic entrepreneurship in the SMEs sector. As mentioned in the limitation, the used of subjective, self-reported data in the performance of this study may incur the overly self-confidence of respondents and positively biased answers. Thus, the future research should also try to collect objective data to gauge performance or perhaps as a reference to compare with the subjective data. Last but not least, the inclusion of several critical control variables such as size, number of years in operation, and type of the company should also be considered in future studies.

5.8 Conclusion

This research is a new effort to examine the relationships between strategic entrepreneurship and performance of SMEs in Malaysia. It provides an improved insight of the exploration variables represented by entrepreneurial orientation (EO), entrepreneurial values (EV), and exploitation variable represented by knowledge creation process (KCP) together with their influence on the performance of SMEs. The results disclose the presence of positive relationships between the variables and performance of SMEs with all the hypotheses accepted.

The findings and implications of this research could be beneficial to the studies on strategic entrepreneurship and entrepreneurship in developing nations like Malaysia on performance of SMEs. It also contributed theoretically to the amended model of strategic entrepreneurship by having it empirically evaluated and corroborated. The multiple regression tests confirmed the exploration and exploitation components of strategic entrepreneurship influence positively to the performance of SMEs albeit there might have certain factors being not recognized within this research.

This quantitative research gives important assessments to the impact of particular variables that represent the SE model on performance of SMEs. The large survey data collected with superior distribution in respondents' demography enhanced the research quality and significance.

Having scarcity of resources accessible by the managers/owners of SMEs in Malaysia, it is very crucial for them in mapping out the correct future development directions and solid approaches that deliver positive outcome within a short term timeframe. Managers/owners of SMEs who prepare to employ strategic entrepreneurship could concentrate on the development of entrepreneurial orientation (especially on risk-taking dimension), entrepreneurial values, and knowledge creation process to shore up the company performance. However, managers should also be aware not all changes will give immediate positive outcomes on the performance. Certain important changes need time and could in fact somehow decrease the growth performance, nevertheless firms that are enthusiastically engage in innovation activities have higher chances in achieving sustaining competitive advantage in the long-term timeframe.

Whilst every one of the hypotheses tested was accepted, it is skeptical should any policy implications be obtained by this research prior an additional refined method investigating the complex relationships among the variables, and the inclusion of several critical control variables such as size, number of years in operation, and type of the company. Nevertheless this research did examine in detail a combined view of exploration and exploitation, (represented by EO, EV and KCP respectively) on the performance of SMEs in Malaysia. With the backdrop of the dynamic international economic condition, emerging nations, like Malaysia, have to confront a lot of obstacles in several industries. The central findings of this research are still giving significant implication to the government and SME top management, who subsequently could influence the economic growth positively and develop sustaining competitive advantages.

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