

CHALLENGES FACING SMALL AND MEDIUM ENTERPRISES IN SINGAPORE
SEEKING ACCESS TO INTERNATIONAL MARKETS

by

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CHALLENGES FACING SMALL AND MEDIUM ENTERPRISES IN SINGAPORE
SEEKING ACCESS TO INTERNATIONAL MARKETS

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DEDICATION

THIS DISSERTATION IS MADE POSSIBLE AS I AM CONSTANTLY REMINDED OF THE PERSEVERANCE REQUIRED AND EXHIBITED FROM ALL SUCCESSFUL ENTREPRENEURS. MY HEARTFELT DEDICATION TO ALL ENTREPRENEURS OF SMALL AND MEDIUM ENTERPRISES AS WELL AS ALL THOSE WHO ASPIRE TO BE FUTURE BUSINESS OWNERS. NEVER GIVE UP IN YOUR DREAMS AND PURSUITS. NEVER STOP BELIEVING IN THE CONTINUAL ADDING OF VALUE TO YOUR SURROUNDINGS AND ENVIRONMENT.

ALSO, A DEDICATION OF MAGNITUDE THAT GOES BEYOND WORDS TO MY LATE PATERNAL GRANDMOTHER WHO CAME TO SINGAPORE WITH NOTHING AS A FIRST GENERATION SINGAPOREAN. WE CAN ONLY IMAGINE THE FRAGILITY OF THE SITUATION WHEN SHE SAILED ACROSS THE SOUTH CHINA SEAS. SHE HAD SURVIVED THE JAPANESE OCCUPATION OF SINGAPORE DURING WORLD WAR TWO AND WENT ON TO WORK AS A DOMESTIC SERVANT WHEN SINGAPORE WAS RETURNED AS A BRITISH COLONY. HERS WAS AN EPIC STORY OF STEELY DETERMINATION. RESILIENCE, PERSEVERANCE, HUMILITY, EMPATHY – THESE ARE THE VALUES SHE HAS LEFT BEHIND, GUIDING QUALITIES FOR A SUCCESSFUL ENTREPRENEURIAL JOURNEY.

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ABSTRACT

Challenges facing small and medium enterprises in Singapore seeking access to international markets.

According to The World Bank, the GDP in Singapore was ranked 36th in the world at 364 billion US dollars in 2019 while GDP per capita was ranked 10th in the world at 65 thousand US dollars in 2019. According to the Singapore Department of Statistics for 2020, small and medium enterprises (SMEs) in Singapore support 70% of total employment while contributing to 43% of the national GDP. Given Singapore's small size, it is not surprising that its domestic market is limited. For Singapore SMEs who are ambitious for further growth, the only way to grow is to go overseas. Enterprise Singapore conducted a survey in 2016 and found that for SMEs with businesses in foreign markets, their overseas revenues are higher than their domestic revenues. However, encouraging Singapore SMEs to move into international markets has proven to be not easy. Singapore SMEs are reluctant to venture overseas and will continue to be domestically focused. Not enough of them are willing to leave their comfort zone and expand their presence into international markets. As reported in The Straits Times, the national newspaper, on 29 January 2018, a survey done by QBE Insurance on more than 400 firms discovered that only fourteen per cent of the SMEs surveyed express intention to expand outside the shores of Singapore. Nearly 50 per cent simply showed no interest in going overseas for the near future. Among other reasons for not intending to access international markets, 42 per cent was due to insufficient funds, while 38 per cent felt that they are still unfamiliar with the standards and processes of the overseas markets. However, the pressing for entrepreneurship awareness has become more evident in recent years. Maintaining a double-digit GDP Growth Rate in Singapore or even to achieve between 5 to 10 percent has become more challenging. With a GDP Growth Rate of 13.94% in 1970, it has been less than 5% from 2012. Prior to the Covid-19 pandemic, GDP for 2019 ended at a 1.35% increase from previous year. Yet, Singapore's Foreign Direct Investment (FDI) has been increasing since the nation's independence. FDI for 2019 closed at US\$120.44 billion, contributing to 32.17% of the nation's GDP. Singapore ranked second in the world for its FDI in 2019, second only to the United States. This research project will thus study and present a thorough review of the constraints faced towards entering entrepreneurship in Singapore, identifying the obstacles, concerns and economic challenges faced. Subsequently, the constraints, concerns and economic challenges faced by Singapore SMEs when accessing international markets will be identified. Finally, this research project will establish proposals, changes and recommendations pertaining towards encouraging entrepreneurship into the Singapore population as well as facilitating more SMEs in Singapore to expand into neighbouring countries and beyond. The results of the study and learnings taken will hopefully help to encourage more entrepreneurs coming from within the Singapore population as well as more Singapore SMEs to boldly move out of the comfort of Singapore and expand overseas.

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LIST OF ABBREVIATIONS

SME- Small and Medium Enterprises

SBF- Singapore Business Federation

GDP- Gross Domestic Product

FDI- Foreign Direct Investments

MNC- Multinational Company

GLC- Government-linked Company

TIMSS- Trends in International Mathematics and Science Study

PISA- Programme for International Student Assessment

OECD- Organisation for Economic Co-operation and Development

USAID- United States Agency for International Development

NORAD- Norwegian Agency for Development Cooperation

SIDA- Swedish International Development Cooperation Agency

EPZ- Export Processing Zones

CEO- Chief Executive Officer

MOE- Ministry of Education

IP- Intellectual Property

I&E- Innovation and Enterprises

ECG- Education and Career Guidance

i

ITE- Institute of Technical Education

WSDip- Work-Study Diploma

APEC- Asia Pacific Economic Cooperation

ACRA- Accounting and Corporate Regulatory Authority

IT- Information Technology

R&D- Research and Development

PSLE- Primary School Leaving Examination

GEP- Gifted Education Programme

GCE- General Certificate of Education

USA- United States of America

KPI- Key Performance Indicator

PMD- Personal Mobility Device

IHL- Institutes of Higher Learning

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CHAPTER I: INTRODUCTION

1.1 Introduction

Small and Medium Enterprises play a vital role in contributing to the economic health of any country. SMEs provide job opportunities and facilitate the reduction of unemployment while contributing significantly to the Gross Domestic Product (GDP) growth. Subsequently, contributing to the political stability of a country. SMEs are perceived to be articulate which allows them to operate at a considerably reduced cost. Not surprisingly, SMEs provide an attractive channel to be outsourced to, in particular the outsourcing of a company's production process. However, the financial health of SMEs also depends on the economic status. They thrive more when the economic situation is doing better or well, but struggle when the economy is faltering or volatile as they generally operate on a tight budget.

SMEs are nurseries for the larger firms of the future. After all, Apple was founded in a garage of a suburban Californian residential home. SMEs are sometimes described as the backbone of the economy, contributing to the forming of a more flexible system within the economy where firms of all sizes are interlinked. This is crucial for attracting more Foreign Direct Investments (FDI). Large corporations look for stable domestic suppliers to enhance their supply chains. SMEs are categorised as companies with a revenue of less than S\$100 million or employing 200 or fewer employees.

The SMEs in China have evolved to be the major growing force, contributing to 40% of the national GDP as well as providing diversification of products and employment creation. Similarly, SMEs are also key to countries such as Japan, Korea and all the other industrialised nations as they help in job creation, reducing a nation's poverty level and improving the welfare of the population. In Taiwan, it has already become so evident that their SMEs have significantly encouraged and bolstered an entrepreneurial spirit, indirectly injecting flexibility into its economy.

According to data from The World Bank, the GDP in Singapore was ranked 36th in the world at 364 billion US dollars in 2019 while the GDP per capita was ranked 10th in the world at 65 thousand US dollars in 2019. According to the Singapore Department of Statistics for the year 2020, 281 300 businesses were incorporated in Singapore. 278 500 are SMEs and this makes up to 99% of the businesses incorporated in 2020. Also, these SMEs are found to be supporting

70% of Singapore's employment market in 2020 while contributing to 43% of the national GDP. Clearly shown is the level of contribution from Singapore SMEs to the growth of the nation's economy or the significant degree of dependence of the Singapore economy on the successes and contributions of the SMEs. It's not an understatement to say that the well-being of the Singaporean economy is dependent on the success of these businesses. Small businesses are therefore the core engines of a nation's economic growth.

Expansion into international markets is a natural route of a successful business. It offers new revenue potential of new markets and new customer types, especially when it is the first go-to-market. Diversification can reduce risk by not being dependent on one market. If one market is under-performing, another more successful geographical market can cover its losses. The expansion also offers a larger talent pool, providing access to the right people for the right positions. Global reputation and branding are other advantages that come with global expansion. It is a result of being able to serve international customers across the region and will appeal to potential new regional customers for a Singapore SME. Expanding abroad can offer a competitive advantage over competitors and even potential competitors by being present in a country which they are not. Finally, operating in other countries can reduce considerably labor and other operational costs, especially regarding labor-intensive core functions such as manufacturing and software development. Of course, the risks of expanding into other countries certainly must be contemplated as well. These can be the inability to find the right staff, lack of competency to manage and control local team remotely, unfamiliarity with tax and labor regulations, the unpredictability of political and economic conditions, and misjudgment of the market potential, customers, operational costs, and competitors in the targeted expansion country.

Although Singapore is wealthy, its small geographical size can only result in its domestic market being small and very competitive. As such, the SMEs eventually have to seek opportunities in overseas markets, perhaps starting with neighbouring. The 2016 survey by Enterprise Singapore showed that the overseas revenue of SMEs contribute to 53 per cent of their overall revenue. However, the overseas revenue of large enterprises formed only 40 per cent. It is vital in Singapore to encourage more home-grown and subsequently global companies so as to complement the multinationals based in Singapore, especially those multinationals using Singapore as their Asia-Pacific or regional headquarters.

Unfortunately, getting local companies to enter into the international markets is always a challenging task.

Even so, the Singapore government has not stopped encouraging more Singapore companies to venture abroad. Yet, as reported in *The Straits Times*, the national newspaper, on 29 January 2018, a survey done by QBE Insurance on more than 400 firms has found that only a dismal fourteen percent of the SMEs have the intention to venture abroad with a targeted foreign country in mind, and nearly 50 per cent simply do not have the interest in expanding overseas. The top reason cited by 42 per cent of them was lack of funds to even consider accessing an overseas market. Meanwhile, 38 per cent cited being not familiar and having insufficient knowledge of operating in foreign markets. Other concerns include having an adequate understanding of the level of competition of targeted foreign markets as well as their regulatory and legal compliance. Political stability of a foreign nation is also a consideration. The QBE Insurance survey report also suggested that another possible factor behind the resistance to venture abroad could be the driving belief that local growth revenue is already sufficient

However, the pressing for more entrepreneurship awareness has become more evident in recent years. It has become more challenging to maintain a double-digit GDP Growth Rate in Singapore or even to achieve between 5 to 10 percent. With a GDP Growth Rate of 13.94% in 1970 to 9.82% in 1990, it has been less than 5% from 2012. Prior to the Covid-19 pandemic, GDP for 2019 ended at a 1.35% increase from previous year. Yet, Singapore's Foreign Direct Investment (FDI) has been increasing since the nation's independence. FDI for 2019 closed at US\$120.44 billion, contributing to 32.17% of the nation's GDP. Singapore ranked second in the world for its FDI in 2019, second only to the United States. Interestingly, Switzerland, a nation of approximate 8.5 million people in 2019, depended only on US\$37.31 billion for its inflows of foreign direct investments.

The numbers clearly show a strong dependence on foreign companies or multinational companies (MNCs) putting investments onto the shores of Singapore. Undeniably, this is a quick solution to provide employment opportunities and keep unemployment rates at low levels. While benefiting from technology transfers, Singaporeans have increased opportunities to learn the best practices from the MNCs. More so, when these MNCs positioned Singapore as their Asia-Pacific Headquarters, this provides opportunity for regional market exposure for the local employee. Together with the remuneration offered to the individual, supported by their strong

financial resources, seeking employment with MNCs may be a better option than dwelling within the uncertainties of entrepreneurship. Perhaps, it becomes understandable that going into entrepreneurship is hardly a pull factor and lesser of a push factor for Singaporeans? However, as the saying goes, it is better to be independent than reliant. Over the years, we have seen MNCs come and go, depending on the economic environment. While quick to employ so as to catch on the economic wave, they are also quick to lay off workers as well as shutting down offices and factories when their numbers are not meeting. Job creation will always be one of the key goals for government and depending only on MNCs for providing jobs may come to a plateau.

This study is carried out with the intention of reviewing and understanding the present challenges faced by the SMEs in Singapore when seeking access to international markets and thus preventing them from further organic growth. We need to study the external and internal obstacles that are preventing or even discouraging SMEs in Singapore from moving out of their comfort zone of only dwelling within the domestic market.

However, there is also the related question of the reluctance of Singaporeans going into entrepreneurship. We need to study and understand the discouragement or lack of encouragement that is preventing Singaporeans from stepping forward. Perhaps, this also requires a change in mindset from the comforts and assurance of full employment to the acceptance of a calculated risk into entrepreneurship. Looking into the demands of the education system in Singapore may provide feasible answers to the mindset and competitive culture of the population. No doubt the government needs to not just continue, but to increase their investments in entrepreneurial support as well as create an encouraging environment to attract more investments from the private sector. The government needs to navigate within the ever-changing entrepreneurial landscape and articulate accordingly when facilitating the aspirations of aspiring entrepreneurs. Being fast in reacting may not be sufficient, but perhaps the government too, also needs to take a more entrepreneur approach. This approach needs to be more creative than the conventional or traditional methods of organising overseas trade missions, facilitating business matching with foreign partners, corporate incentives, among others. Typically, it looks reasonable for a government to only provide the infrastructure for facilitating the emergence and growth of entrepreneurial SMEs. However, in Singapore, perhaps a more handheld approach from the government is required, at least on selected local SMEs.

The research will subsequently concentrate on proposing recommendations or actions to eradicate or minimise the identified challenges. Going further, the impact of the proposals will also be evaluated. Hopefully, this research will provide a better understanding of the challenges that small and medium enterprises in Singapore are facing when seeking to enter into international markets. Ultimately, the goal is to make Singapore not just a financial and trading hub, but also a country known internationally for its entrepreneur prowess and spirit. While recommending proposals will be put forward in this research together with the accompanying impacts, we look forward to inspiring further research on this subject to be conducted in the near future.

1.2 Research Problem

Small and medium enterprises in Singapore are reluctant to venture overseas and will continue to be domestically focused. Not enough of them are willing to leave their comfort zone and expand their presence into international markets.

The Swiss gives Rolex and the Swiss Army Knife to the world. Nokia is a Finnish company. With only a 10.35 million population, Swedish entrepreneurship contributes Ikea and Volvo to the world economy. More recently, Spotify for music enthusiasts. Singapore is right in the midst of Asia, well connected internationally with an acclaimed airport and seaport. Equally important, well supported by its financial infrastructure. It is therefore imperative that Singapore should not just stay within its domestic market but to leverage on its advantages and expand overseas, at least within Asia.

Associate Professor Dr Tan Wee Liang, from the Strategic Management Department at Singapore Management University's Lee Kong Chian School of Business says, many Singapore SMEs are just not prepared to even consider the possibility of venturing outside Singapore. Especially for local family-owned companies, they already have enough current issues and challenges to address without even finding the time to think about expansion. Not uncommon to also hear that those companies with desire to expand overseas actually explored the possibility and then discovered that they are constraint by insufficient manpower and finances. At all times, the preoccupation with survival is always evident and

pressing, addressing only immediate local concerns. As a result, developing a perception of not having the capacity to go overseas or simply just not having the required excess capacity to do so.

Dr Tan Wee Liang also noted that while there are relevant government support schemes available, there seems to be a general reluctance on the part of the SMEs to take up such schemes. These are schemes whereby the government of Singapore guarantees the lending from the banks to SMEs solely for their expansion into overseas markets, facilitates SMEs in their building of their networks, provides funding for collaborations between Singaporean and overseas companies although with certain conditions to be met, connects digital businesses to opportunities as well as provides funding for SMEs to invite consultants to share their expertise in areas such as brand building for the international markets and gathering of overseas market intelligence.

Mr Ho Meng Kit, former Chief Executive Officer of the Singapore Business Federation, mentioned in Channel News Asia Commentary on 16 March 2020 that although there are several government-initiated programs supporting Singapore firms to go overseas, many are still reluctant and seemingly remain consistent with their focus on the domestic market. Apparently, this reluctance is more evident with the latest trends of the digital economy, better technology, and improved transportation links. Obviously, not wanting to leave the relatively comfortable and certain home market, going abroad is probably too much of a jump in the deep.

Singapore is a small market with limited opportunities for the development of good start-ups. However, the government plays it safe by giving contracts to proven large companies, even when the requirements can be fulfilled by smaller companies at a lower cost. Government-linked companies (GLCs) are run so well, leaving SMEs with little space to develop. There is certainly a need of change in the mindset of government officials with regards to facilitating more effective entrepreneurial activities. One such implementation change is to prevent or disallow GLCs and MNCs from competing with SMEs for smaller contracts that are lower than a certain size. This allows SMEs the space to grow and expand. There is also a need to review again the degree of access to fundings for SMEs.

Singapore is well-known for its students' stellar performance in mathematics and science. The study conducted in 2019 by Trends in International Mathematics and Science Study (TIMSS) revealed that both primary and secondary level Singaporean students have come out top in rankings for both science and mathematics subjects. The influential Programme for International Student Assessment (Pisa), run by the Organisation for Economic Co-operation and Development (OECD) and taken every three years, provides education rankings pertaining to international tests in mathematics, science and reading taken by 15-year-olds in more than seventy countries. In 2016, Singapore was rated first for mathematics, reading and science with its teenagers coming top in tests for the 3 assessing factors. OECD education director, Andreas Schleicher said Singapore was "not only doing well but getting further ahead". Perhaps, while the education system clearly pushes for academic excellence, it has also conditioned Singaporeans to be more risk averse and take a more stable and safer path of employment especially with good-paying jobs?

Singapore Management University's Professor Chung Wai Keung was unapologetic in his interview which was published in the national newspaper, The Straits Times, on 6 April 2011, entitled, "Our risk-averse culture hinders social mobility". Professor Chung pointed out that there is a risk averse culture in Singapore and it is weighing down its social mobility, thereby discouraging entrepreneurship. This is unfortunate as entrepreneurship is a means for the low-income population to scale the social hierarchy. He mentioned that while the government was intrinsic when encouraging Singaporeans to take risks, the whole system has been discouraging to students from doing so. Children were told by their elders to be diligent in their studies from young and to excel academically is the utmost measure of success. They did so obligingly, and it is only natural that students accept the rationality of just finding a job after leaving school as a norm. In this environment, they were conditioned to advance in their academics as high as they can as this path is perceived as a safe route to take. Progressively, students become reluctant to try out unconventional ideas for fear of failure. This is not surprising as they are taught almost in a binary manner where there is a correct and not correct way of doing things. Professor Chung reiterated the need to figure and draw out a comprehensive plan on how to provide training to students for jobs that will be existent 10-15 years later. According to him, university graduates here having safely cleared all the academic hurdles, tend to be "conformists". Most would pick a "routine life" of paid employment over striking out on their own. In so doing, he says, they sacrifice the chance to leapfrog increasingly rigid social hierarchies.

1.3 Research Questions

In attaining our research objectives, these are some research questions we need to be asking:

Do SMEs lack the necessary knowledge to traverse the unfamiliar issues pertaining to the target foreign countries, overcoming cultural differences and an environment where regulatory compliance as well as business practices may be completely different from Singapore's?

What can be done to facilitate SMEs in conducting their own market analysis of target countries as well as drawing out a feasible marketing plan and strategy? Subsequently, attaining the ability to analyse their market risks and assessing what needs to be taken to increase their success rate as well as finding the right model for venturing abroad?

Do SMEs lack the knowledge in grooming their talents in Singapore that can spearhead their overseas expansion plan? If so, what guidance and assistance can be provided?

Are SMEs in Singapore clarified on the financial resources, funding structure and operating model required for overseas expansion? Are the SMEs able to identify their capabilities gap and subsequently build the capabilities required to bridge the gap?

What can be done in assisting the SMEs in Singapore in finding the right business partners, both local and foreign, so as to tap on their expertise and networks?

Can platforms be constructed to facilitate mentorship and exchange of entrepreneurship ideas among SMEs, thereby accelerating synergy and encouraging more SMEs to venture overseas?

Are SMEs efficient in managing local employees of target countries? Is adequate product or service training provided to the overseas staff? Are the values built in the overseas office in sync with the Singapore office?

What more can be done to enhance governmental support and resources so that SMEs can learn more about the target country, business environment and practices before venturing overseas?

How does the government encourage more people into entrepreneurship by taking away the stigma of business failure and managing society's expectations as well as acceptance? Subsequently, how to assure such people by giving them a clear pathway for a second chance in their career, whether as an entrepreneur again or as an employee?

Should entrepreneurship including financial management be taught in school? Thus, cultivating an entrepreneurship mindset to the local population even at the teenager age group or younger?

How can governmental support be further utilised to encourage entrepreneurship among working adults, especially young adults?

Perhaps governmental intervention is required in facilitating SMEs to come out with niche products or identify niche markets, subsequently marketing the niche products while leveraging Singapore as a brand name? Similar to what the Swiss had done.

1.4 Purpose of Research

This research has a long-term goal of achieving a better understanding of the challenges faced by small and medium enterprises in Singapore when seeking access to international markets.

Much positivity has been mentioned pertaining to Singapore's progress made within its short history since attaining independence. Its status as a shipping and logistics hub, an appealing financial and banking industry, a world-renowned international airport and airline, an infrastructure that is alluring to regional immigrants to work and reside. These are the positive comments commonly heard and even written and published in the media. Not surprisingly, Singapore's Foreign Direct Investment (FDI) has been increasing since the nation's independence. FDI for 2019 closed at US\$120.44 billion, contributing to 32.17% of the nation's GDP. Singapore ranked second in the world for its FDI in 2019, second only to the United States. Yet, Singapore's GDP has been consistently less than 5% from 2012. Prior to the Covid-19 pandemic, Singapore's GDP for 2019 ended at an 1.35% increase from previous year. Interestingly, Switzerland, a nation of approximate 8.5 million people in 2019, depended only on US\$37.31 billion for its inflows of foreign direct investments.

Clearly there is a pressing need for more entrepreneurship awareness. Not just to be satisfied with setting up business within the local domestic market, but to expand beyond the shores into the international markets. Expansion is vital considering a small market like Singapore with a population size of only 5.7 million. As such, the research has the following objectives:

1. To provide a thorough and comprehensive review of the sources and characteristics of the constraints towards entrepreneurship in Singapore, identifying the obstacles, concerns and economic challenges faced.
 - a) A review of the education system in Singapore. Subsequently, identifying the obstacles inhibiting the encouragement of entrepreneurship among young students.
 - b) Understanding the local culture of the population, thereby recognising the inhibits preventing the initiation of entrepreneurship.
 - c) Establishing the current business environment of Singapore, including the degree of government involvement. More so with Singapore being ranked second in the world for its FDI in 2019. Subsequently, identifying the discouraging factors against the drive for entrepreneurship as well as for current SMEs to flourish domestically and expand overseas.
 - d) A review of current government policies and incentives to encourage entrepreneurship within the population.

2. To identify the concerns, constraints and economic challenges faced by Singapore SMEs when accessing international markets.
 - a) A review of current government policies and incentives to encourage entrepreneurship within the population as well as facilitate overseas expansion of current SMEs.
 - b) Identifying the current mindset of the local entrepreneurs and how the mindset was molded, including the influence presented by the local business environment and its challenges to the local entrepreneurs.
 - c) Subsequently, to identify the obstacles, concerns and economic challenges faced by SMEs in Singapore when accessing international markets

3. To establish proposals, changes and recommendations pertaining towards encouraging entrepreneurship into the Singapore population as well as facilitating more SMEs in Singapore to expand into neighbouring countries and beyond.
 - a) Including entrepreneurship into the current educational curriculum so that students are exposed earlier to this notion and its benefits.
 - b) Increasing awareness to the local population on the benefits of the entrepreneurship path and not to stigmatise failure.
 - c) Recommendation of changes to current government policies and incentives so that they are more effective in encouraging entrepreneurship within the population as well as facilitate overseas expansion of current SMEs.
 - d) Proposing programs to support and facilitate local SMEs in business sustainability as well as business expansion.
 - e) Recommending proposals to drive local SMEs towards expansion into international markets.

The outcome of this research targets to remain helpful and valuable to Singaporeans aspiring to be successful entrepreneurs with sustainable businesses. Certainly, this research aims to direct the individual towards strategic considerations before deciding to embark on the entrepreneurship journey. This research is expected to contribute significantly to the knowledge and reduce the gap in available literature on the challenges facing small and medium enterprises in Singapore seeking access into international markets.

CHAPTER II: LITERATURE REVIEW

2.1 The importance of small and medium enterprises to society and the economy

Karadaq (2015) reiterated that the role of small and medium enterprises within social and economic developments is highly valued and recognized. This applies to both developed and developing countries, particularly after the 1980s. They contribute to the GDP growth of a country as well as add to the numbers of new job creation at a low cost of capital and subsequently facilitate the reduction of poverty. Karadaq (2015) also includes that SMEs improve the links between different industry sectors, provide opportunities for the usage of different technologies, create opportunities for expanding the entrepreneurial base and the pool of both skilled and semi-skilled workers. As such, SMEs can provide adequate and comprehensive support to large-scale enterprises. More essentially, Karadaq (2015) highlighted that SMEs are able to enter niche markets which may not be profitable for larger enterprises. In this way, they contribute to the development of strategic policies that are structured towards the process of decentralization and facilitating rural development, especially for larger countries. However, what is missing from Karadaq (2015) is a comprehensive and strategic approach for SMEs to enter these market niches. Also, the more important aspect of protecting these market niches from being taken over by larger enterprises when they do get profitable. Perhaps governmental intervention is required.

Small and medium enterprises are sometimes called the backbone of an economy as they provide integration and flexibility to the economies of industrialised countries as well as emerging economies (Robu, 2013). They provide market competition and are quick to introduce and promote new products or services into the market. According to Robu (2013), it is not incorrect to say that a good SME environment provides the platform for further growth and development of a national economy by supplying quality and competitive services and products while able to adjust the quantities relevant to the market. Robu (2013) further emphasised that SMEs are the largest contributors to the gross domestic product. For Japan and China, their SMEs contribute to 60% of their nation's GDP while in the United States of America that number is higher at 65%. The findings from Robu (2013) can be likewise translated to the Singapore SMEs and the importance they play in contributing to the Singapore economy. More so, when they are able to venture overseas in their expansion.

Ayyagari et al. (2011) looked at 47745 firms across 99 countries during 2006-2010 and proved that SMEs are the largest contributors to the employment market for a country. Firms with 5 to 250 employees are found on average to engage 66.76% of the active population of a nation. They are also responsible for new employment, creating approximately 86.01% of new jobs and lowering unemployment. Ultimately, the challenge of the 21st century for SMEs is global competitiveness. Customers need to be provided consistently with reliable products as well as quality services while the market environment is immersed in global competition. Ayyagari et al. (2011) did not extend further on the approach and processes involved in providing such reliable products or quality services constantly while in the midst of global competition. We will need to do so in our research, with regards to Singapore SMEs.

2.2 Benefits for small and medium enterprises entering international markets

Exporting has been ongoing for centuries, an extensive strategy for companies to internationalise. It is a fast and easy channel for entering foreign markets as only low levels of commitment and risk are involved. The firm is not required to make substantial resource commitment into foreign markets and get involved with the process of establishing a foreign office. A manufacturing firm can use its local production facilities to produce and export into the targeted foreign market rather than invest in the construction of new manufacturing facilities in the foreign market. Exporting allows SMEs to avoid making excessive resource commitments and then get themselves exposed to high risks of investment which may turn out to be unreasonable (Ratten et al., 2007). The benefits spelled out by Ratten et al. (2007) certainly applies to Singapore SMEs too and drives the urgent need to undergo this research in understanding the challenges faced by Singapore SMEs in entering international markets.

According to Hsu et al. (2013), internationalization is a key growth approach for SMEs whose local market is limited. It can quickly enable SMEs to realise their economies of scale while increasing their market penetration. SMEs with subsidiaries or branches in foreign countries certainly possess the opportunity to access advantages pertaining to the host-country-specific. The end result is they are able to quickly increase their knowledge base, marketing capabilities, and service as well as product competitiveness through experiential learning. While venturing into foreign markets presents growth opportunity and creation of values to the SME,

implementation of the pertaining strategy is not easy as it involves high costs, among many other challenges. Missing from Hsu et al. (2013) is to address how SMEs with no overseas subsidiary can also find the opportunity to access the specific advantages of an international market, thereby increasing their knowledge base and capabilities as well as competitiveness. For Singapore SMEs, it is imperative that we address this in our research.

2.3 Challenges to address for the sustainability of small and medium enterprises in Singapore

We see some similarity between the SMEs in Malaysia and Singapore. According to Khaliq et al. (2011), the key problems faced by SMEs in Malaysia are insufficient knowledge or skillsets in marketing practices, product branding, maintaining the loyalty of customers and having insufficient financial resources. Similarly, there is also a lack of credible contacts with other enterprises, both local and overseas. Khaliq et al. (2011) reiterated that it is indispensable for firms in Malaysia to be focused on continually improving their capabilities on innovating new products as well as widening their marketing channels. Also, they need to improve their research and development abilities and put more care and management into the managing of enterprise intellectual capital. These issues are consistent with what Singapore SMEs are facing too. Khaliq et al. (2011) further reiterated the importance of intellectual capital as it affects the level of success towards achieving competitive advantage as well as gradually replacing the physical assets in modern enterprises. While Khaliq et al. (2011) did not extend further on how enterprise intellectual capital can be optimally managed, we will need to explore this aspect in our research with regards to Singapore SMEs.

Karadağ (2015) pinpointed that despite their advantages over large-sized competitors, SMEs in Turkey still possess weaknesses and challenges of their own. Lack of management experience resulting in management mistakes, inability to develop an effective marketing strategy and inexperience in financial control are among key explanations for SMEs' business failures. Among various problems of the SMEs, most have a financial nature. These can be problems in utilising bank loans as well as the difficulty in accessing other sources of finance such as engaging angel investors and venture capital companies. SME business owners from a technical background usually have limited knowledge on finance and accounting. SMEs in Singapore also face such similar challenge when involving business sustainability as well as subsequent

expansion. More so for Singapore with its high cost of labour as well as the cost of bureaucratic transactions and launching of new businesses. Certainly, reducing red tape is vital when examining new venture launches and encouraging entrepreneurship. The issues spelled out by Karadaq (2015) for the Turkish SMEs certainly applies to Singapore SMEs too. By addressing these similar aspects in our research, we can further understand the challenges faced by Singapore SMEs.

SMEs in developing economies tend to have lesser access to the usage of new technologies, a lack of knowledge in preparing business plans and insufficient managerial capabilities. Having a low concern for innovation, largely due to the high costs of R&D, is a major reason of SMEs being hesitant or slow to adapt technology into their processes. As such, SMEs face various challenges when attempting to convert Research and Development projects into viable business ideas that can be then turned into profitable opportunities (Karadaq, 2015). This is a similar situation faced by SMEs in Singapore.

Karadaq (2015) further adds that due to not having sufficient information on foreign market opportunities as well as having inadequate knowledge on accessing financing assistance, the competitiveness of their products and services is lowered. As such, SMEs quite naturally turn towards only the domestic market. This is one major challenge which SMEs in Singapore also face with regards to ensuring a product or service is sustainably competitive in the midst of globalisation. Subsequently, moving further into the 21st century, environmentally friendly products and services are increasingly in demand. However, the complex processes involved in environmental legislation and the high costs incurred to comply with the legislation can be a challenge for SMEs to even start initiating into the market. However, Karadaq (2015) did not expand further on the approach of how the competitiveness of products and services offered by SMEs can be raised. We will need to address this in our research so that the sustainability of Singapore SMEs can be enhanced, thereby increasing their capabilities of expanding into the overseas markets.

Hameed et al. (2019) writes that entrepreneurs in Saudi Arabia are constantly working with the fear of failure in mind as well as facing risk of aversion. There is a lack of training and coaching provided by the government. Within the entrepreneur community, there is an acknowledgement that the traditional rules of business engagement are just too formal and outdated. Financial

support from the government is also found wanting, especially for new and young entrepreneurs. Just like in Singapore, entrepreneurs in Saudi Arabia face the risk of being crowded out by government-linked companies as well as large companies on fiscal policies and investment spending. Again, just like in Singapore, this results in most of the Saudi and Arab youth preferring to work in public firms. Surely there are qualified people but apparently preference is towards working as employees rather than to be an entrepreneur. This momentum is further not helped by the experience and insights shared from their social interaction and from seniors or peers. Unfortunately, experienced entrepreneurs are not sharing enough of their entrepreneurship journey with newcomers. The writings of Hameed et al. (2019) are worthy to explore further in our research due to its similarities with the situation in Singapore. New entrepreneurs and SMEs from both countries face similar challenges.

To attain sustainability, Waware (2024) reiterates the importance of SMEs having strong perseverance when facing setbacks by exploring bold approaches of combining their current resources and innovating their business in terms of strategy and technology. A positive mindset characterized by optimism, tenacity, and efficacy is vital in the effective dealing of challenges and setbacks. SMEs must continue to assert a competitive mentality, exhibiting adaptability and ingenuity to quickly identify and capitalise on opportunities that may arise during a crisis. When an entrepreneur exhibits resilience, consumers tend to perceive the sustainability practices of the organisation and its leadership. This leads to their positive perception of the brand's strength and enhances their intention to continue doing business with the organisation. These attributes pointed out by Waware (2024) are certainly worthwhile for all entrepreneurs to remember and adhere, more so for anybody who is contemplating of entering entrepreneurship,

Upon gaining independence in 1965, the Singapore government was adamant to stimulate and speed up Singapore's economic development growth. Industrialisation was the main agenda, and the government was certainly entrepreneurial then by investing in companies in the manufacturing, financial, banking, trading, transportation and shipbuilding sectors (Ang et al., 2006). However, Wang (2018) noted that the Singapore government intervention only led to an elevated concentration of innovative activities in only selected fields. Those fields not prioritised by the government unfortunately produced minimal patents. Evidently, innovation in Singapore leans to a top-down approach, engineered by the government. This results in a limited development for private sector-led innovation. As such, there is some success due to

government intervention but limitations are also exhibited in terms of the amount of local innovative players in Singapore. The government-linked companies (GLCs) have been largely dominating the local innovation system. Too many of the policies and resources have been directed towards these star companies and they need to be strategically directed way. Getting more local companies to be motivated into performing Research and Development as well as facilitating the transfer of knowledge from MNCs and GLCs will be the key challenge for Singapore. However, it becomes more challenging when these GLCs are also registered companies under the Companies Act of Singapore and are therefore also subject to the same requirements as private businesses. Wang (2018) listed out Israel and Taiwan as positive examples to look into. In Israel, while the government is continuously attracting MNCs as well as supporting firms owned by the state, particularly those in the defense industry, the local entrepreneurs have also been active in innovation and development as well as setting up of new firms. The government of Taiwan consistently promotes research in public institutions while supporting the development and growth of private industry. Perhaps Wang (2018) gave a good reminder that excessive government interference only brings about resources being concentrated to a minor number of players. However, insufficient or lack of government support can result in missed opportunities for growth and development. While Wang (2018) rightfully pointed out that innovation in Singapore leans more to a top-down approach and is constantly led by the government, Wang (2018) did not go further in exploring how innovation can be ignited from SMEs. Also, the issue of how to minimise overlaps in market participation between GLCs and SMEs in Singapore was not addressed in Wang (2-18). These are areas we will have to study further in details pertaining to the sustainability and growth of SMEs in Singapore.

Most Singapore SMEs have the perception of over-regulation by the Singapore government and felt discontent over the regulations and their implementation. Their most frequent complaints on being over-regulated has been the license fees and other related costs that businesses are required to pay as well as the manner in which these regulations are implemented. While not disagreeing with the need for regulation, these regulations are predominantly focused on enforcement and compliance (Tan, 2014). In addition, government assistance schemes directly addressing the needs of start-ups are simply insufficient. Obviously bureaucratic in their approach, policy makers also have to overcome the challenge of government agencies being viewed as bureaucratic. Entrepreneurship development agencies should not be only emphasising only on growing firms with potential as this may result in SMEs having the

impression that the government only picks winners. Having this impression understandably discourages them from seeking to utilise the infrastructure (Tan, 2014). What is missing from Tan (2014) is a detailed analysis of each of the currently implemented regulations as well as the existing government assistance schemes. In our research, we will need to do a thorough study of each of these implementations and schemes and subsequently understand their impacts on the SMEs. Of course, this leads to our recommendations for better fitting regulations and schemes for the SMEs.

Tan (2014) commented that the bankruptcy law was notably amended in 1995 in order to enhance Singapore's entrepreneurial climate. For debts below S\$500,000, the Official Assignee may grant a discharge after the bankrupt has spent at least three years in bankruptcy which is the eligibility period for discharge from bankruptcy. This is of course after taking into account the cause of bankruptcy and its pertaining period, the repayments already made, the bankrupt's remaining assets and his or her conduct during the bankruptcy. Tan (2014) reiterated that even with this amendment which creates a conducive climate for entrepreneurship as well as facilitates responsible risk-taking, this is only but only one small step in addressing the issue of shunning business failure. The typical Singapore worker still prefers to be a successful manager or employee than to venture a start-up. Certainly, much more needs to be done to create awareness of role-model entrepreneurs to the public.

Tan (2014) was in favour with the features of the United States of America Small Business Administration and expressed that such features should be incorporated into the Singapore business environment. While Singapore has numerous agencies intertwined to work together coherently, there is no policy which specifically reserves a certain size of government procuring contracts to SMEs. In North America, the Office of Government Contracting for the United States of America Small Business Administration formulates and implements policies that make sure government purchases are directed to their SMEs. Under the Small Business Act, federal agencies actually process various procurements that are reserved wholly for only the participation of small businesses. These business deals are called "small business set-asides." Under this Act, only small business contractors can be involved in purchases at certain predetermined levels by government agencies. For procurements exceeding \$100,000, government agencies are required by law to make a "best effort" attempt to engage only small, disadvantaged or women-owned small businesses if the business opening exists under the

contract. For procurements exceeding \$500,000 (one million dollars for the construction industry), the contractor company is required by law to possess a clear direction of facilitating to achieve the objectives of the small business subcontractors. The contractor company has to show how they will be partnering with the small business subcontractors in their involvement as well as the providence for timely payments. Tan (2014) rightfully pinpointed the move to introduce more features of the United States of America Small Business Administration into Singapore. However, while Tan (2014) has elaborated on the features, Tan (2014) did not explore further on which features are beneficial to Singapore SMEs when introduced and how they can be implemented. In our research study, we will need to go deeper into these details, leveraging from not all but some of the carefully selected features of the United States of America Small Business Administration, making sure they are suitable for the Singapore SMEs.

Deriving from the Global Entrepreneurship Monitor framework, the largest annual international research initiative that collects and analyses entrepreneurship data, Gomulya et al. (2015) surveyed the entrepreneurial landscape in Singapore and discovered that while more people are contemplating to start new businesses in Singapore, there are still various challenges to overcome, in particular providing entrepreneurial education as well as improving the ability to innovate and differentiate products and services. The 2015 Entrepreneurial Activity Prevalence Rate (TEA) for Singapore was 11.6%. This was slightly more than half of the total Entrepreneurial Intention rate of 21.4%. This shows that there is still a significant gap between entrepreneurial intentions and actual participation in entrepreneurial activities. Gomulya et al. (2015) supported for more education and training programmes to be introduced so as to raise the level of entrepreneurial knowledge and skill sets among Singaporeans. As Gomulya et al. (2015) did not further explore, in our research study, we will need to further investigate and quantify the reasons for this significant gap between entrepreneurial intentions and actual participation in entrepreneurial activities

2.4 An entrepreneurial culture in Singapore is the essence for the successful establishment of small and medium enterprises

Hameed et al. (2019) pinpointed the obvious that there should not be the fear of failure and to always observe and learn the surroundings with a positive attitude. An obvious point yet seldom practised, thus worthy of reiteration. There is always a certain degree of risk involved when

taking the entrepreneurship route as it is linked to the alternative of having a lucrative career as an employee, balancing family relationships, maintaining both a good physical health and strong financial well-being. As such, the appetite of taking risk for any individual is vital and affects the process when making decisions.

Hameed et al. (2019) then brings out the importance of entrepreneurship education. While noting that family environment molds the personality characteristics of students during their upbringing, it is still essential that students attend courses on entrepreneurship in universities where they will also be involved with small practical activities conducted to boost and further develop their entrepreneurial concepts and skills. They should learn how to identify opportunities and design the solutions. Most business schools only teach students how to be a good manager in large organisations as well as techniques to be an effective team member, instead of giving them the necessary training of overcoming risky situations and guidance towards innovation and creativity. Hameed et al. (2019) was more pressing in addressing almost urgently the issue of entrepreneurship being educated in schools so that students can learn to acquire interest in being an entrepreneur hopefully in the near future. The government needs to provide subjects pertaining to entrepreneurship for students to actually study and hope that they can be motivated about starting small businesses. The government also needs to appreciate the value and contribution of small businesses to a nation's economy and subsequently encourage the growth of these small businesses through governmental laws and policies. Hameed et al. (2019) then argues that the government should create a policy that ensures regulatory bodies provide directives to universities in holding activities which can help students grow in their entrepreneurial skills. It then becomes the universities' role and responsibility to influence entrepreneurial thinking and behaviour in students by organising entrepreneurial programmes and workshops. Certainly, an idea which the universities and tertiary schools in Singapore must strongly look into.

Hameed et al. (2019) encourages more researchers to continue studying on the design of entrepreneurship so that students can easily understand the key attributes of being an entrepreneur. Universities' entrepreneurial courses should be touching on developing a student's personality and thinking process towards an effective entrepreneur's behavioural skills. The notion of entrepreneurship is certainly lacking in Singapore's education system, perhaps non-existent is a more accurate description. There is certainly an urgency to implement

entrepreneurship education into Singapore's education system perhaps even prior to the students entering universities. This is one aspect we have to explore further. The Singapore government's main thrust of approach is to instill an entrepreneurial thinking into school children by infusing creative thinking skills across the school curriculum. In addition, a school may accelerate the process of acquiring business skills through organised extra-curricular activities such as joining clubs or participating in special events. However, this is shown to be still insufficient and the notion of implementing a straightforward entrepreneurship education looks more imminent, perhaps even starting from secondary school education. The writings of Hamid et al. (2019) were much appreciated and serves as a platform for our research study pertaining to the feasibility of entrepreneurship education in Singapore.

The Singapore government has realised that alterations and modifications are necessary in order to encourage entrepreneurship. It is somewhat disturbing that the preference of the majority of its citizens, particularly graduates, is towards careers as employees for organisations (Tan, 2014). While there has been a growing consensus that business failure should not be stigmatized, Tan (2014) concluded that the typical Singaporean still prefers the path of being a successful manager or employee rather than to take the risk of starting a business. Subsequently, more successful entrepreneurs have to step up as role-models and facilitate public awareness on entrepreneurship. Interestingly, Tan (2014) suggested establishing a pool of SME business counselors who can mentor and guide new startups. However, what is missing from Tan (2014) is a comprehensive and strategic approach on how this pool of SME business counselors can be selected, what are the criteria and what are the benefits to these counsellors once their mentoring startups grow.

Hameed et al. (2019) listed seven characteristics to be considered for a successful entrepreneur to have, basically unique attitudes and behaviours that make them different from others. These are being innovative, the drive for achievement, locus of control, propensity of taking risk, having a positive attitude, motivation and fortitude. While being innovative is the backbone of entrepreneurship, the drive and need for achievement is essential for the entrepreneur to attain excellence. These are individuals who need to feel the edification of achievement and will do everything to attain their goals, designing better solutions along the way. This is a vital integral part of an entrepreneur's personality. Locus of control can be internal or external. Those with external locus are unable to handle situations that are out of their own control. On the other

hand, those with internal locus of control think that situations can be controlled by them as they are happening due to them. Thus, they do not hold the external factors responsible when things do not turn out well. Therefore, the locus of control which entrepreneurs should possess is internal. The propensity to take risk is the degree to which an individual responds to the risk. In other words, how much risk the individual can take. This risk-taking propensity therefore differentiates an employee from an entrepreneur. A positive attitude enables an entrepreneur to be comfortably firm in all negative circumstances. Motivation is one of the most important characteristics of an entrepreneur as it drives a person to take calculated risks and achieve success. Motivation must always be a component of an entrepreneur's personality. Fortitude is the extent to which an entrepreneur faces hurdles intelligently. How the individual reacts in a negative situation, revealing his/her patience in difficult situations. These mentioned seven characteristics are certainly worthy of further research with having the success of Singapore entrepreneurs in mind. They certainly apply to Singaporeans inspiring to be future entrepreneurs and are traits that are currently lacking.

Nyanama (2021) brought forth the motion that it is not completely correct to perceive entrepreneurs as risk-taking individualists who can independently and boldly organise resources to create new business ventures. For entrepreneurs to emerge convincingly within a culture, they must be granted social acceptance within their communities. In this way, the activities associated with their new business ventures can be easily accepted as legitimate and socially beneficial. Without this acceptance, it is very unlikely that entrepreneurs would emerge. Nyanama (2021) then implies that for entrepreneurs to emerge compellingly, the culture of risk and rewards at the national level must be developed. This also applies to the entrepreneurial landscape in Singapore where certainly more needs to be done to increase entrepreneurial activities.

Nyanama (2021) brought out an example of entrepreneurship out of necessity by pointing to the less developed countries in Africa. While most people in Africa become entrepreneurs simply out of the desperate necessity of generating the needed income, the entrepreneurs in developed countries do so for the purpose of changing careers or becoming self-employed. It is therefore easier to understand how entrepreneurial decisions are made in less developed countries in Africa, in particular with high youth unemployment within an extreme poverty environment. Not surprisingly, SMEs constitute almost ninety percent of the business in most of these

countries. Singapore entrepreneurs can learn from this example by sizing up and feel the level of the hunger and the desperate need to succeed in entrepreneurship simply out of necessity for entrepreneurs of these countries in Africa.

According to Volkman et al. (2009), entrepreneurial skills, the way of thinking and behaviour can actually be taught and learned. Also, entrepreneurship education is a lifelong process, starting from youth to and through adulthood. Volkman et al. (2009) commented that major corporations are also stepping up to provide leadership in meeting the demand for entrepreneurship education. For example, Microsoft has been sponsoring a wide variety of IT-related entrepreneurial programmes. A number of programmes actually engage successful entrepreneurs as volunteer advisors and mentors for the students. Mentors play a major role in incubating student businesses. Leveraging from the writings of Volkman et al. (2009), this is certainly lacking in Singapore. One suggestion at this point will be for government-linked companies (GLCs) and established SMEs in Singapore to be more involved in the entrepreneurship education of students and adults, both in the area of financial sponsoring as well as the transfer of knowledge and know-how. In addition, agencies such as the United States Agency for International Development (USAID), the Norwegian Agency for Development Cooperation (NORAD) and the Swedish International Development Cooperation Agency (SIDA) have made funding into youth development and entrepreneurship as important priorities. This is also one area the Singapore government needs to look into and prioritise on.

Guo et al. (2016) compares Singapore with Switzerland just to demonstrate that the balance is imperfect between the market and the state. Small states succeed if they are able to negotiate successfully the demands of politics, international forces and domestic factors but with a flexible market mechanism. However, having a state that puts itself as a centralised unit and with high political control (referring to Singapore) provides more challenges in encouraging an entrepreneurship culture versus a liberal and corporatist state exhibiting bottom-up approach to governance (referring to Switzerland). Practising direct democracy, Switzerland has a bottom-up approach to policy making. This ensures legitimacy based on consent and participation, through the mediation of Cantons and citizens as well as competition among the Cantons, resulting in the inbound of research and education investments. By contrast, Singapore concentrates on a legitimacy whereby the government retains the final say as a result of a top-down approach to policy making while running a state-managed capitalism. The Singapore

government needs to reconsider their current top-down approach, making the necessary adjustments so as to promote a stronger entrepreneurial culture. Certainly, capitalism that is state-managed is not a favoured environment for SMEs to dwell in. What is missing from Guo et al. (2016) is a comprehensive and strategic approach on how the Singapore government's current top-down approach can be further tuned and adjusted to promote a stronger entrepreneurial culture. In our research, we will certainly explore these areas, providing details on the current status and mechanism of this top-down approach. Subsequently, providing recommendations on how it can be strategically adjusted or fine-tuned to create a more entrepreneurial culture.

2.5 Challenges of entering international markets for small and medium enterprises in Singapore

Considering the limited size of Singapore's domestic market, more SMEs have no choice but to include in their business plans the venturing into overseas markets as part of their expansion strategy. While the government-linked companies (GLCs) and larger Singaporean companies have already ventured into the international markets, SMEs are increasingly finding it difficult to expand overseas. Not surprisingly, more facilitation is needed to help SMEs in improving their productivity so as to increase their top-line growth. Thus, Yahya (2016) recommended that the focus should be on helping local companies to improve their revenues, instead of only subsidising technology investment costs. In this context, there is a vital need to help Singapore companies to internationalise and expand first into the Southeast Asian region. While Yahya (2016) did not expand further on how local companies can be assisted to improve their revenues, our research study will certainly explore further on this, in particular, expansion to overseas markets, and certainly not just a simple solution like government financial subsidy.

Not Surprisingly, Spring Singapore derived five main barriers to internationalization faced by Singapore SMEs. Namely, insufficient financial resources, high costs involved of sustaining overseas operation, limited access to capital as well as government assistance, limited knowledge and awareness of accessible opportunities in the overseas markets. Spring Singapore then further do a survey among SMEs to find out their awareness of current government internationalization initiatives for SMEs. Respondents were invited to indicate whether they were aware of the listed key government programmes for each economy. From the responses

indicted in Figure 1 shown below, the awareness is shown to be generally stronger in Hong Kong, China, Malaysia and Peru. However, point to note is that these results were of course based on a limited number of SMEs for each economy. (Spring Singapore: Study on SME Internationalisation Best Practices Across Selected Asia-Pacific Economic Cooperation Economies, 2011). With only 29% of the SMEs surveyed in Singapore aware of the available international initiatives, a research study is necessary to understand reasons for this lack of awareness and subsequently to propose viable solutions to increase awareness.

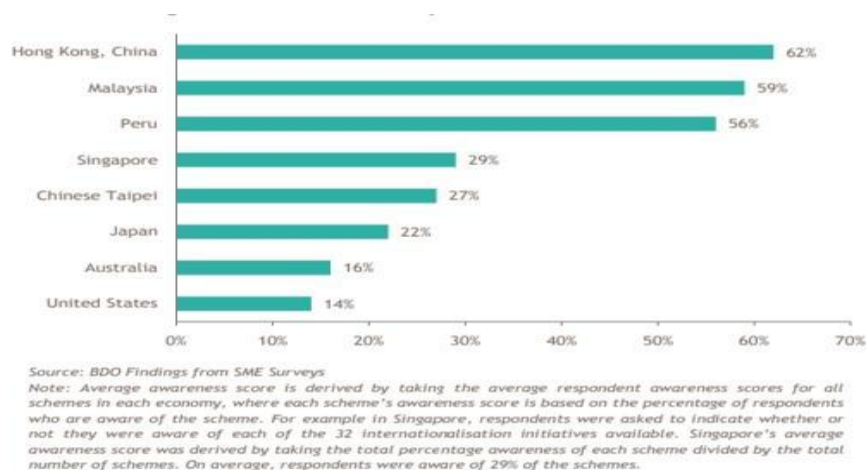


Figure 1: Awareness of Key Internationalisation Initiatives

According to Jenifer et al. (2015), breaking cultural barriers is key to the fostering of an organizational climate as it subsequently creates opportunities for overseas expansion. Many misunderstandings or even problems may arise when people from different countries holding different values come together, resulting in challenges, disagreements and conflicts if not well managed. This will impact free trade policies, localisation as well as business relationships, international marketing strategies and industrial relations. Thus, cross cultural communication needs to be well-managed to avoid disagreements and conflicts so as to avoid disruptions to the goal of achieving business objectives. To increase the probability of success especially within the many cultures of the Asian continent, Singapore SMEs have to quickly understand the challenges involved in the cross-cultural communication process and quickly overcome such barriers. Misunderstanding has always been the foremost barrier to conducting an effective communication in a multicultural environment due to different values and beliefs, resulting in an uncomfortable level of anxiety and uncertainty. People working in multicultural environments often do not make the effort and fail to understand the norms of the other culture

and act accordingly. As a result, this leads to unintelligent choices and cultural stereotyping which can exaggerate or over-generalise what we perceive about people, leading to increased anxiety. Thus, these stereotypes are the major reasons for the misunderstanding of the opposite culture and can lead to miscommunication. As such, to internationalise successfully, Singapore SMEs need to move away from thinking about their own culture as the standard against the others. One's own cultural experience can unintentionally make him or her feel that his or her culture is distinctive and subsequently the inability to appreciate other cultures' differences. This ethnocentrism increases the level of anxiety. Jenifer et al. (2015) recommends that employees should receive some form of cross-culture training. If possible, foreign language training should also be given for those often in contact with foreigners. These recommendations apply to Singapore SMEs if they intend to internationalise effectively and improve their sustainability level within international markets. While Jenifer et al. (2015) recommends basic cross-cultural training especially for new employees as well as language training, in the Singapore SME context, this research study intends to propose more recommendations to break down any cultural barriers which may inhibit business expansion for Singapore SMEs.

Toulova et al. (2015) recognised the highest barriers to going international as perceived by Czech SMEs are the lack of language skills and experience with foreign markets as well as the high costs involved in the promotion efforts for forays into foreign markets. As a result, governmental support and subsidies are found wanting and this leads to potential entrepreneurs having insufficient information on their targeted foreign markets. Toulova et al. (2015) concluded that a lot depends on SMEs having previous experience with foreign trade and whether the SMEs did adequate market research on the targeted foreign markets before entry. Governmental support for SMEs' internationalisation should also include the reduction of administrative requirements that may discouragingly slowdown SMEs from going abroad. Leveraging from Toulova et al. (2015), Singapore SMEs face similar challenges when considering internationalisation of their sales and operations. They need to set out their competitive advantages as well as assess their own skills and quickly pinpoint how they may differentiate themselves from their competitors.

Tan (2014) recommended fostering international entrepreneurship by providing consistent advice and guidance on entrepreneurship. The Asia Pacific Economic Cooperation (APEC) launched its SME Business Counselor Certification program. This program invites individuals

who have the intention of being SME business counselors to be first certified and this is after fulfilling certain requirements. Singapore does not have this program. Perhaps with qualified counselors providing informal and direct assistance as well as mentoring, both entrepreneurs and SMEs could benefit and be more prepared to enter international markets at a sustainable manner. Again, what is missing from Tan (2014) is a comprehensive and strategic approach on how this pool of affordable SME business counselors can be selected, what is the criteria and what are the benefits to these counsellors once their mentoring startups grow.

Beier et al. (2016) reiterated that a certain acceptable level of legitimacy and reputation is essential before entering successfully into a new foreign market. Thus, SMEs wanting to enter foreign markets must build relationships with the national stakeholders of the targeted foreign markets and earn their confidence. However, this becomes more challenging for SMEs that have limited resources and lower reputations compared with large firms. In addition, such firms are at a higher risk of not succeeding because of their unawareness of cultural differences and the accompanying economic and political regulations. Beier et al. (2016) then suggested that SMEs begin their international business expansion first to a single foreign market that is geographically close with low initial liabilities. This serves as a training ground for the acquisition of adequate international experience as well as increasing their competitive advantages. Once achieved, they can then proceed to overcome the liabilities of additional foreign markets.

Globalization has increased the density of connections. With transportation and advanced telecommunication technology, the challenges of geographical distances and intercultural differences have been narrowed, leading to a convergence of markets. As such, Beier et al. (2016) argued that the primary challenge here is to obtain access to networks of stakeholders, influential firms and individuals. Network connections enjoyed among SMEs enhances their internationalization processes, allowing them to enter more effectively into foreign markets. Thus, SMEs with broader networks are obviously in a more advantageous position to expand overseas than SMEs with limited networks. SMEs can strategically work with partners from the target country or with partners from their home country with established experience doing business in the target market. However, Beier et al. (2016) raised the differences in the support from partners of home country and partners of the target country. Having an established working relationship with local partners of the target country can provide access to more detailed market

knowledge and a deeper network of contacts almost immediately. Concurrently, this facilitates SMEs to gain access to domestic stakeholders and domestic capabilities to expand further and faster into the target market. However, having relationships with internationally experienced partners of home country or domestic partners can positively influence the international intensity by providing experiences learned on the challenges of entering the targeted foreign market. Beier et al. (2016) highlighted that the domestic partners should be well-connected to the relevant stakeholders in their local countries preferably with experience also in doing business in foreign markets. Beier et al. (2016) quoted the example of domestic companies of Switzerland listed on the stock exchange for having such qualities. These Swiss publicly listed companies clearly have the mindset of being export-oriented and typically have a significant number of employees working in their overseas subsidiaries. This is the direction which the SME business environment in Singapore needs to look upon and work towards. If there is minimal effort or reluctance of Singapore public listed companies to enter international markets, then it becomes even more challenging for Singapore SMEs to do likewise. We will need to study this further for these reasons. After all, public listed business partners may act as “door openers” into a targeted foreign market. Also, where possible, SMEs should mention a highly reputable company as a reference when networking abroad. We will certainly leverage on the writings of Beier et al. (2016), though it may be more effective for our research if he has written the same topic but pertaining to Asian markets. However, the methodology Beier et al. (2016) has described is tinged with experience for following and education.

Similar to Singapore SMEs, many SMEs in China are family-based businesses. The founders likely did not possess management skills or financial expertise. This can be limiting to the firm’s development (Cao et al., 2011). Also, most Chinese SMEs face financial constraints. However, the Chinese government facilitated the development of their SMEs by implementing laws with the objective of removing institutional barriers, encouraging innovations and increasing the competitiveness of SMEs. SMEs in China have very quickly played the vital role of increasing the nation's exports and global market revenues. As such, in 2010, China announced policies to provides their SMEs with preferential tax rates and easier channels to obtain as well as raise funds. Similarly, removal or relaxation of institutional barriers in Singapore can further support the development and growth of Singapore SMEs, thereby reducing the challenges they are facing. Also, access to channels for fund raising has to be made easier and accessible for Singapore SMEs. Unlike the writings of Cao et al. (2011), our research

will first dig out the range of fund-raising channels available in Singapore. Subsequently, we will propose new channels that are more effective or fine-tune the current channels. Otherwise, most Singapore SMEs may be contented to just focus on the domestic market and as such, will almost be constrained by the limiting market size and subsequently limits their negotiation power.

Cao et al. (2011) also proposed that strategic partnership with foreign companies can help to accelerate Chinese SMEs into the global markets. This includes overcoming the challenges of language and cultural barriers. Obviously, speaking the local language of the target foreign market helps an entrepreneur to express his or her knowledge more convincingly to others. More importantly, his or her capacity to interpret other cultures is significantly diminished and thus increases the challenges of entering foreign markets. As such, practicing strategic networking helps Chinese SMEs to quickly access foreign customers as well as suppliers and other resources. This increases their business transactions and operations, while improving their competitive advantages through sharing of knowledge and cooperation within the global market. Similarly, Singapore SMEs should embrace this strategic networking approach so as to increase their success rate when intending to enter international markets.

Both the market and social culture of any foreign market combine and create an individualistic and unique business environment, contained by its own regulatory policies, administrative processes and cultural behaviour. Cao et al. (2011) commented that there are two ways for Chinese SMEs to handle the challenges of foreign culture. The first way is to conscientiously lower their Chinese culture, including their management culture, to fit into the local foreign culture. For example, Chinese SME needs to learn the foreign country's local culture, such as the local ways of doing business, and then put the effort to change their own administrative culture. The aim is to be consistent with the foreign market's business culture and meet less resistance from foreign customers and regulators, including even the media and other stakeholders. At the social level, Chinese SMEs need to look into themselves and adjust their Chinese culture so as to fit into the traditions and culture of the targeted foreign market. This strategy, though compromising, will in the long term allow Chinese SMEs to gradually integrate into the foreign culture. It will certainly be disastrous if the Chinese SMEs make the local employees of the foreign country as well as customers and regulators of the foreign market to simply adopt their Chinese administrative culture. It will be even more detrimental if the

intention of the Chinese SMEs is to change the local culture of the foreign market. This uncompromising approach will potentially receive resistance. This writings from Cao et al. (2011) serves as a reminder to Singapore SMEs to follow suit too, if they want to increase their chances of success in a foreign market, particularly in countries like Vietnam and Thailand where their languages and cultures are unique. The failure to communicate comprehensively is a hinder to the internationalisation process. Social norms differ from one country to the next and Singapore SMEs will be constantly facing such challenges even with their neighbouring Southeast Asian countries.

Cao et al. (2011) suggested a niche market strategy for the Chinese SMEs. Focusing on the niche market allows the Chinese SMEs to only supply specialized products. Besides providing the option of choosing margin over volume, these Chinese SMEs can minimise their usage of the foreign language and dwell less into the foreign culture. The Chinese SMEs can outsource their marketing, administrative and operational functions to other business partners while they build their core competencies pertaining to their niche products or services. Singapore SMEs should have the same approach of targeting niche markets or niche products based on their strengths. While the niche market strategy is commendable, our research will show that complementing with having knowledge of overseas' cultures and their languages expands networks and makes the overseas business more viable for the long term.

Political and institutional constraints can unknowingly work as economic barriers for SME when planning to expand overseas. Rules are developed by governments for day-to-day living and this is through a political and legal framework. However, this also influences the business environment (Rahman et al., 2017), especially with the government determining the fiscal and monetary policies that will influence the way of doing business. Obviously, political instability increases the business cost and competitive disadvantages for both local and international firms. Not surprisingly, some investors may be less motivated to invest in such regions. Rahman et al. (2017) reiterated the importance of political stability as it affects the business environment and the way business is conducted. On the other hand, government policies can be adjusted to quicken the internationalisation of firms. For example, removing international trade barricades and embargoes, setting up export processing zones (EPZ) where the firms can produce and trade under favourable conditions. Therefore, before deciding to enter the international markets, the individual should first understand the nature of the political and legal environment of the target

countries. This is certainly a valued advice from Rahman et al. (2017) for all Singapore SMEs wanting to expand overseas.

Abusing of public power for private or personal gain is corruption. Common forms of corruption include bribery, embezzlement, extortion, nepotism, cronyism, fraud, misappropriation of public assets, among others. Corruption can occur at any time, at any level and in any sector. Corruption not only raises the cost of doing business but discourages both domestic and foreign investments. For SMEs, corruption is a major concern and considered as a significant barrier of entry into a foreign market (Rahman et al., 2017). With a top-down approach by the Singapore government in policy making, Singapore SMEs will certainly find challenges in internationalisation when corruption is a 'norm' in a particular foreign market, perhaps more so when dwelling among the neighbouring Southeast Asian countries. Understandably, Rahman et al. (2017) was generic when discussing the topic of corruption. In our research, we will attempt to dive deeper into this topic without breaking the threshold of its sensitivity.

Rahman et al. (2017) argues that SMEs may find it difficult to counter the global challenges and compete internationally when facing a lack of Research and Development spending and facilities. What is missing in Rahman et al. (2017) is a strategic approach on how Research and Development spending can be increased meaningfully and with value, in particular for the demands of the overseas markets. This obviously applies to all SMEs, not just in Singapore. In the Singapore context, we certainly have to study this issue further and examine how support for Research and Development efforts can be facilitated to the Singapore SMEs.

Hsu et al. (2013) emphasises the importance of a CEO having sufficient international experience. Having the experience of working in a different country while indulging with different customs has a significant influence and impact on a manager's cognitive orientation. These experiences quicken the manager's pace when integrating into a different culture and provide increased confidence when dealing with uncertainties of complex international operations within foreign environments. Such knowledge of foreign markets is vital to overcoming the psychic distance involved when doing business in foreign markets. Consequently, with a global mindset, managers are able to reconcile or extinguish any tensions between the local and global employees. Hsu et al. (2013) reiterated that with international experience, CEOs are better equipped to manage international operations, reducing the

integration and coordination cost, thereby increasing the internationalisation performance. Leveraging from Hsu et al. (2013), as challenging as it may be, an urgency is certainly required to develop and nurture Singapore SMEs towards the goal of being global leaders so as to succeed in the highly competitive global environment.

Companies are now facing increasing competition from overseas. The domestic business environment has been increasingly affected by global economic factors. Small firms cannot continue to isolate themselves from foreign competition, especially for firms operating in industries that span out across the globe (Al-Hyari et al., 2012). Internationalisation can enhance a firm's managerial capabilities while contributing to the development of the economy of the nation. While it improves productivity and creates employment, it also facilitates the optimal use of resources and increases the flexibility for absorbing diversified business risks. Al-Hyari et al. (2012) rightfully pinpointed that SMEs eventually become even stronger players in their home markets when they become more involved in overseas markets.

At the micro level, exporting provides SMEs with opportunities to increase profits while stabilising demands. Subsequently, optimising the usage of production capacity while developing effective management capabilities and continually enhancing product features and production process. The end result is a strong financial performance (Al-Hyari et al., 2012). All points listed are useful for Singapore SMEs to evaluate further and understand their effectiveness, thereby facilitating their overseas expansion with less obstacles.

Al-Hyari et al. (2012) highlighted regulations and red tape as another barrier to internationalisation. Therefore, policy measures need to be strategic in reducing these barriers. Unfortunately, there is an increasing number of policies that are further increasing the administrative workload required by the SMEs. Globalisation has opened the international markets and unfortunately providing SMEs with more challenges. As a result, few SMEs actually attempted to build their export competitiveness without being assured of government support. As such, policy measures must be designed to reduce the barriers of entry by lowering the cost of overseas expansion. This includes the protection of property rights and all transaction costs. Public policy makers must support SMEs to overcome such obstacles. The Singapore policy makers can certainly do more to encourage the overseas expansions of Singapore SMEs and we will certainly be leveraging on the writings of Al-Hyari et al. (2012) as we research

more into this, identifying the current factors that can be inhibiting to the internationalisation efforts of Singapore SMEs. Subsequently, our research study will provide recommendations to reduce these entry barriers.

CHAPTER III: METHODOLOGY

3.1 Overview of Research Problem

Not enough of the small and medium enterprises in Singapore are willing to leave their comfort zone and expand their presence into international markets. The tendency is to continue being domestically focused.

Singapore is right in the midst of Asia, well connected internationally with an acclaimed airport and seaport. Equally important, well supported by its financial infrastructure. It is therefore imperative that Singapore should not just stay within its domestic market but to leverage on its advantages and expand overseas, at least within Asia.

Many SMEs in Singapore are simply not equipped to explore overseas markets. Especially for local family-owned companies, they already have enough domestic challenges and issues to manage without thinking about internationalisation. There is a constant preoccupation with trying to survive, addressing only immediate local concerns. As a result, developing a perception of not having the capacity to go overseas or simply just not having the required excess capacity to do so.

While there are relevant government support schemes available, there seems to be a general reluctance on the part of the SMEs to take up such schemes. These are schemes whereby the Singapore government guarantees the financial loans of local banks to local companies for the sole purpose of their overseas expansion operations while aiding companies to expand their networks and talent base in the region, particularly Southeast Asia. These schemes also provide funding for collaborations between Singaporean and overseas companies as well as provide funding to engage consultants who provide their expertise in areas such as international brand building and conducting of overseas market intelligence.

Mr Ho Meng Kit, the former Chief Executive Officer of the Singapore Business Federation (SBF), mentioned in Channel News Asia Commentary on 16 March 2020 that although there are several government-initiated programs supporting Singapore firms to go overseas, many are still reluctant and seemingly remain consistent with their focus on the domestic market.

Singapore is a small market with limited opportunities for developing good start-ups. Making it more challenging, government officials understandably play safe by going for contracts with large companies. This is when smaller companies can actually realise the requirements at a reduced cost. Government-linked companies (GLCs) are run so well, leaving SMEs with little space to develop. There is certainly a need for change in the mindset of government officials with regards to facilitating more effective entrepreneurial activities. One such implementing change to allow SMEs the space to grow is to offer contracts that are smaller than a certain size to SMEs only. This will prevent or lessen competition between the SMEs with the GLCs and MNCs. The accessibility of funding to SMEs needs to be reviewed too, both in terms of loans and access to venture funds.

Singapore is well-known for its students' stellar performance in science and mathematics. The 2019 edition of Trends in International Mathematics and Science Study (TIMSS), conducted every four years, revealed that both primary and secondary level Singaporean students have come out top in rankings for both science and mathematics subjects. The influential Programme for International Student Assessment (Pisa), run by the Organisation for Economic Co-operation and Development (OECD) and taken every three years, provides education rankings based on international tests in mathematics, reading and science taken by fifteen-year-olds in more than seventy countries. In 2016, Singapore was rated as the top country for mathematics, reading and science with its teenagers coming top in tests for the 3 assessing factors. OECD education director, Andreas Schleicher, said Singapore was "not only doing well but getting further ahead". Perhaps, while the education system clearly pushes for academic excellence, it has also conditioned Singaporeans to be more risk averse and take a more stable and safer path of employment especially with good-paying jobs?

Singapore Management University's Professor Chung Wai Keung was unapologetic in his interview which was published in the national newspaper, The Straits Times, on 6 April 2011, entitled, "Our risk-averse culture hinders social mobility". In the interview, Professor Chung pointed out that Singapore's culture of being averse to risk discourages entrepreneurship. This is unfortunate as entrepreneurship is a vital means for the low-income population to scale the social hierarchy. He stated that while the government may have been encouraging to Singaporeans to take risks, the whole system has not been adequately supporting and in fact discourages students from doing so. Students then rationalise it is better to just look for a

suitable job after leaving school. Students were instructed by both parents and teachers to study hard from young and excel academically. Not surprising that they did so obligingly. Subsequently, they were conditioned to go academically as high as they as it is the safest route to take. Students are told and taught there is a correct way and an incorrect way of doing things. Gradually, they become afraid to try unconventional ideas and their appetite for risk reduces. In this 21st century, Professor Chung reiterated that we must figure out how to train students for job types that they will do 10-15 years later but do not exist now. According to him, university graduates here having safely cleared all the academic hurdles, tend to be "conformists". Most would pick a "routine life" of paid employment over striking out on their own. In so doing, he says, they sacrifice the chance to leapfrog increasingly rigid social hierarchies.

3.2 Research Purpose and Questions

The proposed research has a long-term goal of providing a better understanding of the challenges faced by the small and medium enterprises in Singapore when seeking access to international markets.

Much has been mentioned pertaining to Singapore's progress made within its short history since attaining independence. Its status as a shipping and logistics hub, an appealing financial and banking industry, a world-renowned international airport and airline, an infrastructure that is alluring to regional immigrants to work and reside. Not surprisingly, Singapore's Foreign Direct Investment (FDI) has been increasing since the nation's independence. FDI for 2019 closed at US\$120.44 billion, contributing to 32.17% of the nation's GDP. Singapore ranked second in the world for its FDI in 2019, second only to the United States. Yet, Singapore's GDP has been consistently less than 5% from 2012. Prior to the Covid-19 pandemic, Singapore's GDP for 2019 ended at an 1.35% increase from previous year. Interestingly, Switzerland, a nation of approximate 8.5 million people in 2019, depended only on US\$37.31 billion for its inflows of foreign direct investments.

Clearly there is a pressing need for more entrepreneurship awareness. Not just to be satisfied with setting up business within the local domestic market, but to expand beyond the shores into

the international markets. Expansion is vital considering a small market like Singapore with a population size of only 5.7 million. As such, the research has the following objectives:

1. To provide an inclusive and thorough review of the sources and characteristics of constraints towards entrepreneurship in Singapore, identifying the obstacles, concerns and economic challenges faced.
 - a) A review of the current education system in Singapore. Subsequently, identifying the obstacles inhibiting the encouragement of entrepreneurship among young students.
 - b) Understanding the local culture of the population, thereby recognising the inhibits preventing the initiation of entrepreneurship.
 - c) Establishing the current business environment of Singapore, including the degree of government involvement. More so when Singapore is ranked second in the world for its FDI in 2019. Subsequently, identifying the discouraging factors against the drive for entrepreneurship as well as for current SMEs to flourish domestically and expand overseas.
 - d) A review of current government policies and incentives to encourage entrepreneurship within the population.
2. To identify the constraints, concerns and economic challenges faced by Singapore SMEs when accessing international markets.
 - a) A review of current government policies and incentives to encourage entrepreneurship within the population as well as facilitate overseas expansion of current SMEs.
 - b) Identifying the current mindset of the local entrepreneurs and how the mindset was molded, including the influence from the local business environment and its challenges to the local entrepreneurs.
 - c) Subsequently, to identify the obstacles, concerns and economic challenges faced by SMEs in Singapore when accessing international markets.
3. To establish proposals, changes and recommendations pertaining towards encouraging entrepreneurship into the Singapore population as well as facilitating more SMEs in Singapore to expand into neighbouring countries and beyond.

- a) Including entrepreneurship into the current educational curriculum so that students are exposed earlier to this notion and its benefits.
- b) Increasing awareness to the local population on the benefits of the entrepreneurship path and not to stigmatise failure.
- c) Recommendation of changes to current government policies and incentives so that they are more effective in encouraging entrepreneurship within the population as well as facilitate overseas expansion of current SMEs.
- d) Proposing programs to support and facilitate local SMEs in business sustainability as well as business expansion.
- e) Recommending proposals to drive local SMEs towards expansion into international markets.

The outcome of this research targets to remain helpful and valuable to Singaporeans aspiring to be successful entrepreneurs with sustainable businesses. Certainly, this research aims to direct the individual towards strategic considerations before deciding to embark on the entrepreneurship journey. This research is expected to contribute significantly to the knowledge and reduce the gap in available literature on the challenges facing small and medium enterprises in Singapore seeking access into international markets.

In attaining our research objectives, these are certainly some research questions we need to be asking:

Are Singapore SMEs lacking the local knowledge to navigate the unfamiliar issues in the target foreign countries, overcoming cultural differences, dwelling in an environment where regulatory compliance and business practices are completely different from Singapore's?

What can be done to facilitate SMEs in conducting their own market analysis of target countries as well as drawing out a feasible marketing plan and strategy? Subsequently, attaining the ability to analyse their market risks and assessing what it takes for them to improve their chances of success as well as finding the right model for venturing abroad?

Do SMEs lack the knowledge in grooming their talents in Singapore that can spearhead their overseas expansion plan? If so, what guidance and assistance can be provided?

Are SMEs in Singapore clarified on the financial resources, funding structure and operating model required for overseas expansion? Are the SMEs able to identify their capabilities gap and subsequently build the capabilities required to bridge the gap?

What can be done in assisting the SMEs in Singapore in finding the right business partners, both local and foreign, so as to tap on their expertise and networks?

Can platforms be set up to provide effective mentorship and exchange of ideas among SMEs, thereby accelerating synergy and encouraging more SMEs to venture overseas?

Are SMEs efficient in managing local employees of target countries? Is adequate product or service training provided to the overseas staff? Do the staff in the overseas office share the same values and culture as the staff in the Singapore office?

How can governmental support and resources be further enhanced so that SMEs can learn as much as possible about the target country, market, business environment and practices before venturing overseas or setting up overseas operations?

How does the government encourage more people into entrepreneurship by taking away the stigma of business failure and managing society's expectations as well as acceptance? Subsequently, how to assure such people by giving them a clear pathway for a second chance in their career, whether as an entrepreneur again or as an employee?

Should entrepreneurship including financial management be taught in school? Thus, cultivating an entrepreneurship mindset to the local population even at the teenager age group or younger?

How can governmental support be further utilised to encourage entrepreneurship among working adults, especially young adults?

Perhaps governmental intervention is required in facilitating SMEs to come out with niche products or identify niche markets, subsequently marketing the niche products while leveraging Singapore as a brand name? Similar to what the Swiss had done.

3.3 Research Design

Our research process will be based on a descriptive approach combined with explanatory research in order to identify and present the challenges faced by Singapore SMEs when entering international markets while addressing the entrepreneurial culture in Singapore. Research design will incline towards being qualitative while using secondary data from public data sources as well as primary data from conducted interviews. It will involve both cross sectional and longitudinal studies, with more emphasis on cross sectional study. Qualitative research is explorative research used to recognise and comprehend the underlying reasons and opinions. In addition, qualitative analysis provides insights into the challenges faced or help to build hypotheses for future quantitative research. It is certainly beneficial to try to understand why businesses fail to scale up and what strategies small business leaders can use to boost business performance.

We need to study the external and internal obstacles that are preventing or even discouraging Singaporeans to step forward. Perhaps, this also requires a change in mindset from the comforts and assurance of full employment to the acceptance of a calculated risk into entrepreneurship.

The primary research method for this study is doing a thorough literature review as well as conducting surveys using semi-structured in-depth questionnaires with open-ended questions. Where required and with permission from the participants, one-on-one interviews were conducted to further understand the answers provided to the questions that require further clarification. One of the key takeaways of conducting surveys using semi-structured in-depth questionnaires with open-ended questions is it explores and digs out the lived experiences of the researched participants.

We will identify and analyse the issues, understanding the inhibitions and barriers faced by Singapore SMEs when entering or planning to enter overseas markets. The major findings of the study shall be presented and discussed. At this point, we will attain a thorough understanding and knowledge of the challenges faced by Singapore SMEs when seeking access to international markets. The research will subsequently concentrate on proposing recommendations to eradicate or minimise the identified challenges, subsequently towards encouraging and facilitating more SMEs in Singapore to expand into neighbouring countries and beyond. The recommending proposals can be simply modified or fine-tuned from current policies or

activities, some may be established by making significant changes. We will certainly not hesitate to recommend a complete overhaul to existing systems and will gladly propose completely new recommendations where required. Going further, the impact of the recommendations will also be evaluated, showing how such recommendations can be beneficial and encouraging for Singapore SMES when entering international markets.

Hopefully, this research will add to a better comprehension of the challenges facing Singapore SMEs seeking access to international markets.

3.4 Population and Sample Selection

For this study to attain its objectives, purposive sampling was adopted and used. In purposeful sampling, judgment is used to pick the appropriate participants who could provide reliable and useful information to address the research questions and accomplish the research objectives (Abdullah et al. 2015).

Two surveys were conducted. The first survey targets non-entrepreneurs. These include working adults who are employees from various organisations or companies as well as university students. See Appendix A for pertaining survey form. It is important to understand the challenges they are facing when considering the path of entrepreneurship. Forty participants who met all requirements by purposeful sampling were chosen. Purposive sampling is very selective and certainly not by random choice of selection. The researcher uses careful judgment for selecting the participants in the study (Yin, 2018). Permission was sorted from the participants to conduct the interview.

The second survey targets business owners of SMEs who are only dwelling in the local Singapore market but yet to expand overseas. Obviously, the criteria for selecting the participants were that they had been personally involved in SME business management. It is important to understand the challenges they are facing when seeking access to overseas markets. Thirty participants who met all requirements by purposeful sampling were chosen. As mentioned earlier, purposive sampling is very selective and certainly not by random choice of selection. The researcher uses careful judgment for selecting the participants in the study (Yin,

2018). Permission was sorted from the participants to conduct the interview. The participant's selection is explained below in the next sub-heading of the study.

3.5 Participant Selection

It is vital to structure the open-ended in-depth questionnaires towards understanding the challenges faced when considering to be an entrepreneur in Singapore as well as the challenges faced by SMEs in Singapore when seeking access to overseas markets. This is vital as the survey results will facilitate the subsequent recommendations of entering the international markets. Both surveys were conducted with the candidate having the option to provide contact details. This allows further one-to-one interviews if required so as to enhance the understanding of the survey answers.

Tong & Dew (2016) noted that in a qualitative approach, the essential is that the researcher selects participants who can provide related viewpoints to the research question. This is to ensure data saturation is achieved. Even better when an overlap of data is attained, thereby assuring the attainment of saturation as well as study objectives.

Morse (2015a) pointed out that attaining data saturation is vital to ensure the purity of the study and all overlapping information will have the potential of eliminating any unknown issues.

There is still limitation in purposeful sampling. Unfortunately, the researcher can still leave out a sample of quality and thereby missing out the opportunity to fully explore the research question (Sivell et al., 2015). In any case, the participants were still intentionally chosen as they were found to have a detailed knowledge of the subject matter.

3.6 Instrumentation

Data collection involves sourcing for vital details pertaining to the study. The data was extracted through primary and secondary methods. The study used the semi-structured survey as the primary source of data and if required, one-on-one interviews were conducted to clarify and further understand the selected answers to the survey questions. This allows a more in-depth comprehension and knowledge of the information provided by the participants. Ultimately, accurate primary data for validation is obviously essential.

The secondary method involves the research done using secondary data like government data, government agencies websites, corporate data as well as websites, academic journal articles, related interviewing articles. Documents obtained from literature reviews also certainly facilitated this study and adds to the several sources mentioned.

All in all, the reliability and conformability of the data collected was enhanced, ensuring the validity and richness of the research.

3.7 Data Management and Analysis

To organize the data, programs such as Microsoft Word and Excel were used. All data was interpreted, compared when necessary, triangulated and summarized. All data was transcribed immediately upon completion so that accuracy of the research is preserved.

Yin (2018) stated that in qualitative research, the researcher can be viewed as the vital tool used to collect the data. The study uses purposive sampling. The primary data will be collected through conducting surveys using semi-structured in-depth questionnaires with open-ended questions. Where required and with permission from the participants, one-on-one interviews were conducted to further understand the answers provided to the questions that require further clarification. One of the merits of this approach is that it allows the researcher to examine the experiences of the participants.

A thorough literature review was also done. See Chapter Two. This primary research approach certainly increased learnings from the extracted invaluable information provided by the other esteemed researchers.

Including the secondary data obtained as mentioned, all the collected data will be triangulated. Fusch and Ness (2015) argue the importance of using triangulation which allows the researcher to dig deeper when examining data obtained from reports, surveys, interviews, observation and provides a wider perspective on the research. Triangulation helps in validating the research results by identifying common patterns and cross-referencing the data obtained.

3.8 Reliability and Validity of the Study

Yin (2018) mentioned that the quality of a qualitative study is proven when it withstands the test of reliability and validity. To attain reliability and trustworthiness of the study, the researcher must address the four most vital components. They are transferability, dependability, conformability and conformability as stated by Shoaib and Mujtaba (2016). Reliability refers to accuracy to the extent that the analysis would yield same results if repeated. As such, coherent and transparent interview questions were provided.

Trustworthiness of research results can only be ascertained when the researcher practises and confirms the adherence to the required standards of the research. This is done by conforming to the principles of integrity, reliability and transferability. Otherwise, the quality of the research will be compromised. Hence, as the principal meter determining the quality of the research, validity guarantees that any interpretation of the data is accurate and thereby accomplishing valid conclusions.

Proctor (2017) said that as the qualitative researcher is relying on data that can be subjective and contextual, open to interpretation, the researcher's findings must shift towards the ensuring of reliability and validity. Thus, research findings must always be consistently reliable and credible if they are to be helpful to other scholars. Any analysis must have the mindset of achieving precision and trustworthiness rather than quantity just to gain legitimacy (Proctor, 2017).

Triangulation is critical as it makes sure precision is attained by cross-checking various viewpoints and data interpretation with the research participants. More so when the study uses purposive sampling. Firstly, primary data was collected through conducting surveys using semi-structured in-depth questionnaires with open-ended questions. Where required and with permission from the participants, one-on-one interviews were conducted to further understand the answers provided to the questions that require further clarification. A thorough literature review was earlier done and this primary research approach certainly increased learnings from the extracted invaluable information provided by the other esteemed researchers. The collected data is then triangulated with the secondary data obtained, thus assisting in the validation of the study results through cross-referencing and identification of common patterns.

Achieving transferability of research is crucial. As such, the researcher must make sure that findings can be generalised easily and made acceptable to other situations, according to Proctor (2017). The research must note all irregularities or unanticipated events so as to better clarify the results. This can aid future researchers who might want to leverage them to achieve reliability of their studies. One key importance to note is to continually stick to the research objectivity during the analysis process while consciously ignoring the research participants' bias or prejudices. Malterud et al. (2015) cautioned on the increased probability of data saturation being jeopardised if research participants did not carefully understand the research questions while addressing them.

3.9 Research Design Limitation

Yin (2018) stated that assumptions are only facts that are not yet verified, although they may validate the study. In this manner, researchers made some assumptions first when they are developing the research design. Thus, in this study, the assumption is that small business leaders are overall representative of Singapore's SME business sector and the pertaining leaders. Furthermore, another assumption is that having a small sample population is justifiable as it represents the SME's demographic characteristics in Singapore.

Moreover, it is challenging just to presume that answers provided to the questions in the survey questionnaire were responded in full honesty and accuracy by the small business leaders. It is also anticipated that all the research participants would have appropriate knowledge to each question in the survey questionnaire.

Finally, the limitations that can actually pose a vital weakness for this research are the probability of the research participants being reluctant to share their information openly and the study not being able to be generalised for the usage of future researchers.

3.10 Conclusion

The chapter has discussed the qualitative analysis process and the rationale for using qualitative case study as necessary to analyse the challenges faced by Singapore SMEs when entering international markets. However, prior to that, understanding the challenges faced when

considering to enter entrepreneurship needs to be first addressed. Both challenges need to be addressed and understanding the latter will certainly facilitate the understanding of the former.

This chapter clearly outlined the methodology, research design, and sample size as well as stressing the importance of reliability and validity while conducting triangulation. Of course, like all research, there will always be a design limitation. Small business leaders can use the study results to ease their entrance into international markets. Individuals can benefit from the study results when considering the entrepreneur route.

Once the reader comprehends the approach of this study, the reader is certainly ready to proceed to the next chapter which introduces the findings obtained from the research.

CHAPTER IV: FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings or results from the responses of the research participants. The data from the participants was obtained through conducted surveys and interviews when clarification of survey answers is required. The earlier literature review done also provided many insights from the other esteemed researchers. Secondary data was also mined and obtained through an extensive and intensive research carefully executed. The findings were also in line with the literature of the study to address the study questions.

The research process was based on a descriptive approach combined with explanatory research. The research design was inclined towards being qualitative while using secondary data from public data sources as well as primary data from conducted interviews. It involved both cross sectional and longitudinal studies, with more emphasis on cross sectional study. The research was also explorative so as to understand the underlying reasons and opinions.

These results provide the platform for the subsequent discussions, providing insights into the challenges faced. This also helps to build hypotheses for future quantitative researches. It is certainly beneficial to try to understand why local businesses fail to expand into international markets, thereby unable to scale up while continuing just the domestic business within the Singapore market. This chapter then prepares the reader into the next chapter where recommendations to remedy such challenges are presented.

For the primary research method for this study, surveys were conducted using semi-structured in-depth questionnaires with open-ended questions. Where required and with permission from the participants, one-on-one interviews were conducted to further understand the answers

provided to the questions that require further clarification. One of the merits of this approach involving a purposeful sampling is to examine the experiences of the researched participants.

The other primary research method was completing a thorough literature review which was earlier done. See Chapter Two. This approach certainly increased learnings from the extracted invaluable information provided by the other esteemed researchers. Documents obtained from literature reviews certainly facilitated this study and adds to the several sources mentioned.

The secondary method involves the research done using secondary data like government data, government agencies websites, corporate data as well as websites, academic journal articles, related interviewing articles.

The results attained facilitate in the identification and analysis of the issues at hand as well as understanding the inhibitions and obstacles faced by Singapore SMEs when entering or planning to enter overseas markets. In this chapter, the results will be presented and discussed. In the next chapter, the research will subsequently concentrate on proposing recommendations to eradicate or minimise the identified challenges, subsequently towards encouraging and facilitating more SMEs in Singapore to expand into neighbouring countries and beyond. The recommending proposals can be simply modified or fine-tuned from current policies or activities, some may be established by making significant changes. We will certainly not hesitate to recommend a complete overhaul to existing systems and will gladly propose completely new recommendations where required. Going further, the impact of the recommendations will also be evaluated, showing how such recommendations can be beneficial and encouraging for Singapore SMES when entering international markets.

Hopefully, this research will contribute to a better comprehension of the challenges facing Singapore SMEs seeking access to international markets.

4.2 Government incentives and programs to promote entrepreneurship

Mining of secondary data was conducted to understand the types and nature of government incentives and programs available in Singapore to promote entrepreneurship. Following are the current incentives and programs available.

4.2.1. Startup Founder SG Programme

Launched in 2017, first-time Singapore entrepreneurs will have access to a startup capital grant of thirty thousand Singapore dollars. This is to help jump start their approved business ideas. In addition, the startups are required to co-match funds of up to S\$20,000 to the grant. At the same time, mentorship is provided so as to further encourage their drive for innovation and entrepreneurship. The grant is overseen by the government agency, Enterprise Singapore.

Nanyang Technological University, National University of Singapore, Singapore Management University, Singapore University of Technology and Design and Singapore University of Social Sciences will be providing the mentorship necessary to help entrepreneurs build their startup. This includes networking opportunities with investors and corporates, secretarial and accounting support, talent search and access to exclusive programmes including loans. Subsequently, first-time entrepreneurs will be assisted in their process of scaling their ideas into commercial businesses, getting validation from customers on their products and finding the much needed future capital.

The Singapore government pumps one hundred and fifty million Singapore dollars into the Startup SG Founder Programme in the hope that successful entrepreneurs will be discovered to serve both the domestic and regional markets.

Requirements for first-time founders (at least two of them who are Singaporeans and/or permanent residents):

- Are key decision makers and contribute meaningfully to the company.
- Are not employed externally.
- Are not engaged in studies or part-time work.
- Have undergone entrepreneurship training provided by the five mentioned universities.
 - Entrepreneurship training refers to a structured course or programme that teaches the fundamental frameworks and processes of entrepreneurship. It can cover the following core content:
 - a) Venture creation process, value proposition
 - b) Lean methodology, business canvas model
 - c) Market analysis and validation
 - d) Business model, pricing strategy and go-to-market
 - e) Customer journey, prototyping and product roadmap

- f) Intellectual Property and competitive strategy
- g) Financials and cash-flow
- h) Pitching and fundraising, valuation

Requirements for the company are:

- Have not been granted any funding from another government organisation for the same business idea.
- minimum of fifty-one percent of the issued shares must be owned by Singapore Citizen and/or Permanent Resident
- Must co-match with a twenty thousand Singapore dollars investment as paid-up capital.
- To have a paid-up capital of at least ten thousand Singapore dollars and must be registered with ACRA at the point of application to Enterprise Singapore.

However, the scheme provides mentorship and a startup capital grant of thirty thousand Singapore dollars to only first-time entrepreneurs with approved business ideas. In addition, the startups are required to co-match funds of up to S\$20,000 to the grant. Apparently, it does not include entrepreneurs who may have failed the first time and are starting again for the second or even third time. There is just no second chance. It also does not cover for an entrepreneur's second company. Also, no subsequent grants will be provided and this may be one of the limitations of this grant as more finances may be required to scale up the business after the initial startup. As such, this grant can be made more effective if promising startups are facilitated with additional grants after assessing to have the potential to scale up and more importantly, having a calculated potential of expanding overseas. For sure, second chances must be given to entrepreneurs who have failed in their initial startups. After all, vital experiences are expensively gained from failures. This grant should be easily fine-tuned to also include such entrepreneurs.

4.2.2 Startup SG Tech

This grant is suitable for Singapore companies wanting to engineer and create a breakthrough technology. However, the extent of this technology must be deemed to be able to create new markets. Companies can receive up to two hundred and fifty thousand Singapore dollars if the project is shown to be technically and scientifically viable. In addition, if the project is further

proven to be commercially viable, companies can receive up to five hundred thousand Singapore dollars.

To qualify for this grant, companies must be registered in Singapore and less than 5 years old. The company's annual revenue must be less than one hundred million Singapore dollars or employ fewer than 200 people. The industries covered by this grant includes, clean technology, precision engineering, biomedical science, healthcare, information technology, food science, transportation, robotics, advanced manufacturing.

However, the grant will only be awarded upon the completion of each agreed milestone. Companies avoided this grant simply due to the need to satisfy each agreed milestone before the agreed amount of grant can be given. Understandably, this money being from the government will require accountability to the government. However, entrepreneurs prefer their companies to be autonomous in running and view the need to achieve and report each satisfied milestone as stifling to their momentum. If the mechanism of this grant can be furthered reviewed and improved, it can be an effective grant especially with the generosity of the amount given. The suggestion is to take away the milestones and provide the whole grant after completing a detailed study on the feasibility of the submitted projects. Of course, the criteria for assessment of these projects must be stringent as the grant amount involved is substantial but it needs to be a calculated risk. Another suggestion is for the agreed grant amount of each agreed milestone be given at the start of the milestone and not after completion. After all, it was due to lack of financial resources that such companies seek for the grant, in particular companies seeking to expand into international markets. Such companies will consider the current mechanism of the grant too cumbersome especially when the milestones are to be achieved overseas.

For this grant, startups are also required to co-share with an initial investment of up to twenty per cent as paid-up capital. Suggestion is to simply take away this requirement although the concept of the government preferring the entrepreneur to co-share and have a stake in the project is certainly comprehensible. For this small twenty per cent as compared to the amount to be granted, it is unnecessary and just act as a hindrance. As mentioned, if each project has been carefully examined and its commercial viability or technical and scientific viability deemed attainable at a calculated but acceptable risk, all encouragement and facilitation should be given without any unnecessary hindrance or bureaucratic red tapes.

4.2.3 Startup SG Equity

The intention for Startup SG Equity was to encourage more investments into deep-tech startups based in Singapore for selected sectors only that are considered emerging industries. This includes advanced manufacturing, pharmbio/medtech, and agri-food tech. For this grant, the government co-invests with carefully selected and qualified third-party investors into startups that have been deemed eligible after satisfying certain criteria.

The government had invested three hundred million Singapore dollars into this scheme at the Ministry of Trade and Industry's Committee-of-Supply 2020. The investment cap for deep-tech startups is set at S\$8 million. Also considered are investments in selected venture capital firms who will subsequently invest in deep-tech startups.

Startups seeking for government's assistance in co-investing under this scheme should have paid-up capital of at least \$50,000 and be incorporated as a Private Limited company for less than 10 years. They must already have an identified third-party investor or investors and possess a scalable plan into the international markets. More importantly, they are holding at least one patent with ongoing research collaboration with a research institution. Also, must demonstrate the ability to develop, produce or commercialise tech products and services.

While this is certainly impressive, however, it is obviously only for selected or targeted SMEs. Obviously, most SMEs will not benefit or even eligible to apply. Successful applicants to this grant must have identified ready and independent third-party investor(s) as well as possessing already high-growth potential with clear scalability for the international market. Most SMEs are already facing challenges when attempting to enter their first international market, so this grant is certainly not a fit for them. In any case, this grant's intention was to bring in more investments into Singapore-based deep-tech startups in key emerging sectors like advanced manufacturing, pharmbio/medtech, and agri-food tech. As mentioned earlier, the government will be co-investing with third party investors and this raises the possibility of such companies being absorbed in the future into a GLC company which becomes a competitor to the other emerging SMEs.

4.2.4 RAISE SG: VentureForGood Grant

This is a scheme under the Singapore Centre for Social Enterprise, RAISE. It supports social enterprises in various stages of their business. New and existing social enterprises can apply for grants of up to \$300,000.

The social enterprise should be addressing a local social gap or need to be eligible. The image below shows the grant process and an estimated timeline.



Figure 2: Process of VentureForGood Grant

- Social Objectives include:
 - To identify the social gap with a clear understanding of the social needs.
 - To propose addressing solutions.
 - To identify the beneficiary group or community by identifying their needs in-depth.
- Business Model to include:
 - An accompanying unique selling proposition
 - Definition of market size and this includes the target customer segment as well as a good understanding of the current market situation.
 - To identify both current and future key partners
 - A 2 years financial projecting forecast on revenue, capital and operating costs, incorporating the requested funding amount.

Unfortunately, being a social enterprise business, its primary purpose is to serve specific social objectives, understandably the need to also attain profits but while providing benefits to society.

Also, the profits are returned to operations in principle for the funding of social programs. Certainly, a grant with generous amount but has negligible or no impact to SMEs seeking overseas expansion. Although, this grant does facilitate any inspiring entrepreneurs to at least enter and start their entrepreneurship journeys within the local Singapore market.

4.2.5 Business Improvement Fund under Singapore Tourism Board

This fund was set up to encourage adoption of technology innovation in the tourism sector, including the redesigning of business models. This is obviously to improve productivity and competitiveness. Successful applicants will receive funding support, after subjecting to Singapore Tourism Board's evaluation of the merits of the project.

This fund, unfortunately, is aimed to only encourage the tourism companies to adopt new technology and innovation, subsequently redesign their business models and processes so as to improve productivity and competitiveness. The value of this fund can certainly be increased threefold if it includes facilitating the local tourism companies to expand overseas by establishing affiliated travel agencies in neighbouring countries, especially targeting the affordable population in developing countries. This can be the next step within the approved fund after the tourism company has successfully adopted the new technology and innovation.

4.2.6 Market Readiness Assistance Grant

This grant is suitable for SMEs with intent to expand their businesses into the international markets by providing the support needed for the setting up, business development and marketing efforts for the overseas expansion. SMEs can obtain a grant of up to seventy percent of the eligible costs, capped at one hundred thousand Singapore dollars per company per new market.

This grant is certainly a positivity as it specifically addresses the expansion into international markets. However, it takes more than just financial assistance only to facilitate a SME's successful expansion into an overseas market. The value of this grant can be further enhanced

by providing mentorship. An entrepreneur who has already successfully expanded his or her business overseas can act as a mentor providing invaluable experience. The grant is managed by Enterprise Singapore, a statutory board under the Ministry of Trade and Industry of the Government of Singapore. Enterprise Singapore can certainly match a mentor or mentors to a promising SME wanting to expand overseas. In fact, Enterprise Singapore should present these SMEs applying for the grant as potential business interests to the mentors.

Facilitating the initial startup, SMEs will only enjoy a one-time grant of up to seventy percent of eligible costs, capped at one hundred thousand Singapore dollars per company per new market. Obviously, this amount may be somewhat insufficient for promising SMEs with ambitious overseas expansion plan. As a result, such SMEs will have to spend time sourcing for additional funds, unlikely from the government again but from the private sector. This can be a discouraging factor when SMEs are considering to take up the grant. Thus, Enterprise Singapore really needs to modify this grant by including the possibility of promising SMEs being able to obtain subsequent additional fundings so as to optimise their chances of success in their respective international markets. Of course, the conditions accompanying these additional fundings, including the amount, needs to be worked out.

4.2.7 Productivity Solutions Grant

This grant is suitable for companies that are looking to adopt IT solutions and equipment with the purpose of enhancing their business processes and automating existing processes, thereby improving productivity. However, the purchase, lease or subscription of the IT solutions or equipment must be used only in Singapore.

This grant is specific to certain sectors only. Namely, retail, logistics, food and beverage, precision engineering and construction industries. In addition, this grant also cuts across horizontally in areas of inventory tracking, customer management, data analytics and financial management. Unfortunately, the IT solutions or equipment that are purchased, leased or subscribed from the usage of this grant must be used only within Singapore. This grant should

be extended to include usage outside Singapore, thereby facilitating SMEs with their overseas expansion.

4.2.8 Enterprise Development Grant

This grant was created to help SMEs grow and transform by supporting them in their upgrading of their businesses, innovation and their overseas ventures. To be eligible for this grant, the SME needs to be first assessed to be in a financially viable position to start and complete the project. The grant funds qualifying project costs, in particular, supporting Singapore companies that are not just willing but more importantly ready to venture overseas. As such, this grant helps to take away a certain percentage of the costs incurred when entering overseas markets. However, the grant only covers certain defined items. Namely, third party consultancy fees, software, equipment, manpower cost, maximising resource usage to increase sustainability performance, review and the redesign of workflow and processes, usage of automation and technologies to improve efficiency and sustainable.

Unfortunately, this grant does not fund the marketing or business development costs. This grant could have been of better value if a mentor was provided to those SMEs who are applying the grant to facilitate their overseas expansion.

4.2.9 Enterprise Development Grant (Co-Innovation Programme)

This grant is awarded to projects which were stemmed from proposals arising from Enterprise Singapore's partnerships with France, Germany, Israel, Jiangsu, Korea, Shanghai, the United Kingdom, Zhejiang, Eureka Network.

This grant is a great fit for SMEs looking to collaborate on Research and Development projects which can successfully result in the introduction of new products or solutions with strong market potential. This grant is beneficial in the sense that SMEs will be able to have the assistance and support on businesses that involved cross-border collaboration on technology development and co-innovation. Concurrently, facilitating internationalisation.

Eligible companies can receive up to 70% support for qualifying cost items if awarded. This is used to collaborate with their foreign partners on innovative activities such as joint Research and Development projects with the goal of developing new products or solutions. However, companies will first be assessed on the viability of their financial position of being able to start and complete the project.

Certainly, a grant of value but only limited to SMEs with Research and Development (R&D) capabilities as well as the stringent requirement of needing to be assessed on the financial viability of starting and completing the project.

4.2.10 ACE startup

This scheme benefits first-time entrepreneurs with an innovative idea approved by Enterprise Singapore. Besides the startup capital, the grant includes mentorship support as well as learning programs and networking contacts.

However, this grant will only provide startups up to thirty thousand Singapore dollars by matching \$3 to every \$1 raised by the entrepreneur. It is a commendable grant to kickstart a business idea for a first-time entrepreneur who is expected to further grow his or her business towards achieving sustainability. However, more amounts should be given later to promising startups as 30K is just too little. Just one-time is insufficient. Obviously, this grant is for first-time entrepreneurs and not for already established SMEs wanting to expand overseas.

4.2.11 Early-Stage Venture Funding

This fund is an initiative to support innovation and enterprise, structured to co-fund startups together with Venture Capital firms. The companies that benefit from this funding are early-stage technology startups. The National Research Foundation invests ten million Singapore dollars on a matching basis so as to seed corporate venture capital funds.

This is certainly an attractive grant. However, it is only beneficial to the technology sector in Singapore. Moreover, while the Venture Capital firms have the option to buy over National Research Foundation's share within five years, they may also choose not to. This may result in the startup being absorbed into a GLC in the future.

4.2.12 Double Tax Deduction for Internationalisation

This initiative was established to encourage Singapore enterprises to start their internationalisation journey.

This initiative comes into effect on the Year of Assessment 2019. Singapore registered businesses with overseas business activities will be entitled to a two hundred percent tax deduction up to one hundred and fifty thousand Singapore dollars on expenses incurred on related overseas activities, including overseas trade fairs and advertising campaigns.

4.2.13 Enterprise Financing Scheme

This scheme covers seven areas to be addressed pertaining to the enterprises' financing needs. Enterprise Singapore shares the loan default risk of up to 70% with participating financial institutions in the event of enterprise insolvency. Objective is to help catalyse participating financial institutions' lending to companies who have successfully applied for the scheme.

- Finance green growth projects.
- Finance daily operational cashflow needs.
- Finance domestic fixed assets.
- Finance overseas fixed assets.
- Finance trading needs.
- Finance the fulfilment required for securing of overseas projects.
- Finance the acquisition process of targeted enterprises but with intent to internationalise.

While this scheme has its merits, there are companies still reluctant to it up due to concerns with the accountability of the remaining 30% with participating financial institutions in the event of enterprise insolvency. While the co-sharing of 70-30 is understandable, Enterprise Singapore should consider sharing the loan default risk of up to 100% but of course with only selected companies with qualified criteria. However, this scheme can be further enhanced if mentorship can be provided by assigning experienced entrepreneurs to provide guidance. Thus, Enterprise Singapore can surely do the necessary matching of mentors to companies using the scheme as well as come out with the criteria and conditions for selected companies to lessen their worries of being accountable to the financial institution in the event of insolvency. This, if done, will

surely encourage more Singapore SMEs to seek expansion into international markets, especially when the scheme finances overseas fixed assets, the fulfilment of secured overseas projects and the acquisition process of targeted enterprises with intent to internationalise.

4.2.14 Scale-Up SG Programme

This programme is by invitation only and supports selected local SMEs with assessed high-growth potential. This is to ensure that they eventually will scale up effectively and become leaders in their fields with the hope of becoming future global leaders too. The overall plan is for these companies to grow and continue to contribute to Singapore's economy, creating good jobs for Singaporeans and strengthening the Singapore brand. Singapore SMEs who are interested in the programme must demonstrate a strong track record of growth as well as the ambition to scale further and achieve high potential growth.

If selected, SMEs can benefit from attaining close collaboration within a close-knit community of CEOs and founders, opportunities for partnering up so as to grow the business further and be mentors to future cohorts of participating companies.

This is a programme by invitation only and does not involve financial funding. The idea of this programme is to increase the probability of success of identified local companies with high-growth potential in scaling effectively. This in turn creates a chain reaction by contributing to Singapore's economy as these companies grow. Unfortunately, this programme is only opened to the selected top-tier local SMEs.

4.3 Education System in Singapore

Singapore has been in the news as an impressive education hub, particularly for pursuing higher education. The Ministry of Education (MOE) is a government body with the given responsibility of the management, administration and development of schools and various government-funded educational institutions. The MOE also plays a supervisory and advisory role for private schools. The education system is created with the approach to help students in developing their potentials and aptitudes. In 2010, the then British education minister Michael Gove commended the education system of Singapore which has been credited as “world-leading”.

4.3.1 The Ministry of Education

The Ministry of Education (MOE) is the Singapore government ministry given the responsibility of ensuring that students in Singapore receive adequate and best possible education. Twenty percent of the government’s annual budget is allocated for the development of educational institutes. This amount is solely managed and subsequently to be appropriated by MOE. Besides the private educational institutes, the state educational institutes are also allowed a certain degree of autonomy with regards to the designs of their curriculum, including admission policies as well as qualification criteria for students to obtain government’s aids and assistance. It is a criminal offense if parents fail to enroll their children in schools at the right age. English is used as the main language of instruction in Singapore. While the main medium of education is English, language pertaining to different ethnic groups like Malay, Mandarin Chinese and Tamil are also taught.

Not surprisingly, foreign students, especially from China and India, regard Singapore as a preferred destination for higher studies, in particular for admission into various technical and business schools which offer industry-oriented courses.

Singapore has one of the highest literacy rates in the world. The education system has been evolving to meet the demand for skilled workers required for contribution to the economic development of not just Singapore but also internationally. The MOE targets a minimum of primary education for every child born in accordance with the Compulsory Education Act, made in 2000. Any exemption from schooling has to be certified by the MOE.

There are three stages in the schooling system: Primary, Secondary and Post-secondary / junior college. The school system is divided into two semesters. The first semester is from January to June, the second semester is from July to December.

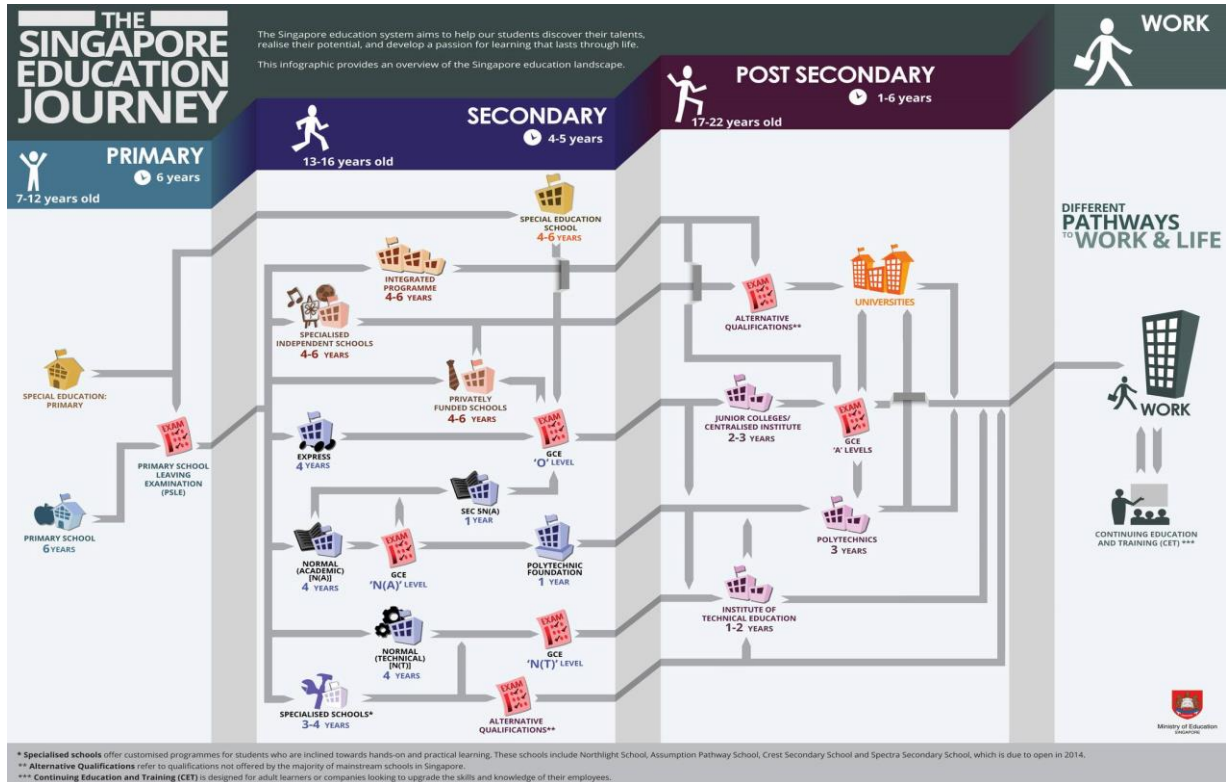


Figure 3: Flowchart of the Singapore Education System

4.3.1.1 Kindergartens

Kindergarten is the starting stage of education for children between 3 to 6 years old, usually spanning 3 years. Most kindergarten schools operate for five days in a week with each day at 2 ½ to 4 hours duration.

Kindergarten education provides children of such age group an atmosphere to interact while learning and playing at the same time. Activities in kindergartens allow development of interaction skills, learning of language, numbers and music. It is certainly an important exposure before entering primary education.

4.3.1.2 Primary education

Primary school education begins at the age of 7 and is a six-years compulsory course providing a strong foundation for future learning. This includes developing a strong foundation in literacy skills, numeracy skills as well as nurturing positive life values and habits. The core of the curriculum are the English Language, Science, Mathematics, and Mother Tongue Language. Students also take minor subjects like Music, Art, Character and Citizenship Education, Physical Education and Social Studies. Science is introduced from Primary 3. Such wide diversity of subjects is aimed to expose students to different areas of study and allowing them to discover their interests and talents. Concurrently, equipping them at a holistic level with a range of knowledge and problem-solving skills while developing in them the core values that will facilitate character building and being responsible to society. From Primary 5 onwards, students can take their core subjects at either the foundation or standard level. Depending on the results of their Mother Tongue Language, selected students may be offered Higher Mother Tongue Language. At the end of Primary 6, students take the Primary School Leaving Examination (PSLE) which will determine the course of their secondary education. The results of their PSLE will determine their course in secondary school that will best suit their pace of aptitude and academic learning. For the few students who are exceptionally good in sports and the arts, they can also seek admission to their preferred secondary school based on their demonstrated talents through the Direct School Admission exercise.

4.3.1.3 Secondary education

There are three streams to which the students are allocated to, basing on their Primary School Leaving Examination results. Namely, Express, Normal (Academic) and Normal (Technical).

The four-year Express Course leads to the Singapore-Cambridge General Certificate of Education (GCE) Ordinary Level (O-Level) exam. Subjects included are English, Mother Tongue, the Mathematics, the Sciences and the Humanities.

The four-year Normal (Academic) Course leads to the Singapore-Cambridge General Certificate of Education (GCE) Normal (Academic) Level exam and the subjects are similar as those in the Express course. Upon passing the course, students will progress to Secondary 5 where they will then take the Ordinary Level (O-Level) exam. Under the Normal (Academic) Through Train programme, they can also bypass the Normal (Academic) Level exam and get

promoted directly to Secondary 5 where they will take the Ordinary Level (O-Level) exam. Alternatively, also under this programme and only if selected based on exceptional results, they can either enter the one-year Polytechnic Foundation Programme or a two-year Direct-Entry-Scheme to Polytechnic Programme via the Higher Nitec course held at the Institute of Technical Education (ITE).

The four-year Normal (Technical) Course leads to the GCE Normal (Technical) Level exam. Besides learning the usual English, Mathematics and a Mother Tongue Language, students also learn subjects with technical or practical emphases with the aim of enhancing experiential and practice-oriented learning.

There are also specialised schools that are designed for students who do not qualify even for the Normal (Technical) stream. Students will obtain the Institute of Technical Education Skills Certificate upon graduation and it serves to prepare them for employment or admission into the Institute of Technical Education.

For students with exceptional talents, almost to the point of gifted, and show proven interests in the fields of math and science, applied learning, arts, and sports, there are the specialised independent schools like the National University of Singapore High School of Math and Science, School of Science and Technology, School of the Arts, and Singapore Sports School.

Some schools offer the six-year Integrated Programme for academically strong students who prefer a less structured approach of learning. This programme develops students by engaging them in a wider learning experience in both academic and non-academic aspects. Students then proceed to pre-university education without needing to take the Ordinary Level examinations, leading to the Singapore-Cambridge General Certificate of Education (GCE) Advanced Level (A-Level) examinations, International Baccalaureate diploma, or National University of Singapore High School diploma at the end of the six years.

All secondary schools provide art and music programs with enhanced programs for selected students who show potential to further develop their passion and ability. The other aspect to complete a holistic education for students is of course physical education. Students are engaged in a variety of physical activities and sports, and this helps to develop character and values.

Outdoor Education imparts the values of resilience and tenacity in students and the ability to interact and work in teams.

After completing secondary education, the students then progressed to post-secondary education and this can lead to the Singapore-Cambridge General Certificate of Education (Advanced level) certification, the International Baccalaureate diploma or the polytechnic diploma.

4.3.1.4 Post-secondary Education

For post-secondary education, there are a few pathways through the following institutions.

- Junior Colleges / Centralised Institute
 - Students can apply for pre-university education at the junior colleges (two-year course) or centralised institute (three-year course) leading to the Singapore-Cambridge General Certificate of Education (Advanced level) examinations or the International Baccalaureate diploma. MOE ensures a healthy and balanced bandwidth of skills and knowledge by having students take at least one differing subject. In other words, at least one subject from Mathematics and the Sciences and at least one subject from the Humanities and the Arts.
- Singapore Sports School / School of the Arts, Singapore
 - Talented students with proven interests in sports and the arts can apply for either of both schools which will lead to the International Baccalaureate diploma for both schools, or a Diploma in Business Studies at the Singapore Sports School.
- Polytechnics
 - Students preferring an education with hands-on experience may apply for full-time diploma courses at the Polytechnics. During the course, there are also compulsory work attachments with industry partners. The duration of these attachments varies

from six weeks to six months. Thus, students gain valuable on-the-job experience with industry experts.

The polytechnics also offer part-time programmes at diploma and post-diploma level. These are for working adults who want to strengthen or deepen their knowledge and skills over certain disciplines of the industries. These programmes are obviously designed to be modular and flexible, catering to working adults.

- Institute of Technical Education (ITE)
 - The ITE provides students with a technical or vocational education. ITE admits both Normal (Academic) Level and Normal (Technical) Level holders into Nitec courses, and O-Level holders into Higher Nitec courses. ITE also offers internship opportunities in the industry for students. ITE graduates can also seek admission into polytechnics based on their Nitec or Higher Nitec results. The ITE also offers part-time courses in modular form to working adults.
 - Work-Study Diploma (WSDip) programmes are 2.5 to 3 years work-study programmes. These are programmes open to in-employment ITE graduates. This programme provides an apprenticeship-based training pathway and is co-developed by ITE and selected partnering companies. This provides trainees with structured on-the-job training at the partner companies' workplaces while receiving a salary for the duration of their course as they are actually full-time employees of the partner companies.
- Arts Institutions
 - Students with interest in the creative arts can enroll in programmes offered by the LASALLE College of the Arts or the Nanyang Academy of Fine Arts. Both institutions are publicly funded and offer degree and diploma programmes in the visual, applied, and performing arts.

- Normal (Academic) Level students meeting the requirements may also apply for the Nanyang Academy Fine Arts Foundation Programme which is a 35-weeks programme. This programme strengthens the students' foundation in their various selected disciplines and thereby prepares them for their diploma programmes.

4.3.1.5 Universities in Singapore

The universities provide undergraduate and postgraduate courses as well as research programmes, basically offering international standard market-oriented courses to students. Research and scholarship programs are also offered to students who meet the requirements and show interest in higher education. The universities aim to prepare students for the knowledge economy while equipping them with the necessary skills to thrive in the industry and where possible, impact the research and innovation ecosystem of the nation. There are six publicly funded Autonomous Universities in Singapore that provide a wide range of academic, research, work-learn and student life options. Namely, National University of Singapore, Nanyang Technological University, Singapore Management University, Singapore University of Technology and Design, Singapore Institute of Technology, Singapore University of Social Science.

4.3.1.6 Education for Working Adults

Since 2017, universities in Singapore have been launching Work-Study Degrees. Companies and universities collaborate closely on designing and delivering curricula that closely link knowledge with practice.

Lifelong Learning Units in universities have been set up to manage programmes catering to adult learners. These are shorter courses leading to Graduate Certificates which can provide a certain degree of recognition in industries. Fostering a culture of lifelong learning is a key task in shifting towards continuing education over a lifetime. In fact, government expenditure has been significantly increased in this area of education while the costs of the programmes have been intentionally made accessible and affordable for workers.

One key initiative rolled out by the Singapore government to support Singaporeans in their lifelong learning is SkillsFuture. SkillsFuture is a national movement carefully designed to give

Singaporeans the opportunities of further developing their potential through lifelong learning and mastery of skills. SkillsFuture involves collaboration with multiple stakeholders. This includes employers, unions, industry associations, training providers and government agencies. The aim is for Singaporeans to take individual ownership of their skills development. The universities have gone ahead to develop a list of industry-relevant courses known as the SkillsFuture Series which focuses on emerging skills areas, such as data analytics, finance, and tech-enabled services. Singapore citizens aged twenty-five and above are provided with an opening SkillsFuture Credit account of five hundred Singapore dollars and top-ups into the account were provided whenever the government announces. This credit amount is then used by the individual to purchase for courses or programmes approved under SkillsFuture.

4.3.2 The private tuition industry in Singapore

The Department of Statistics of Singapore conducted the Household Expenditure Survey from October 2017 to September 2018 and found that Singapore households spent S\$1.4 billion on tuition. The tuition industry has expanded over the years, with tuition and enrichment centres increasing from about 700 in 2012 to more than 1000 in 2020. This means there are more tuition centres in Singapore than primary schools, secondary schools, junior colleges and universities combined. The growing tuition industry in Singapore is fuelled by the increasing average real incomes of households and the aspirations of parents on their children on keeping up with the competition. Despite changes made by the Ministry of Education to direct students towards enjoying more on the journey of learning by moving away from the emphasis of focusing only on academic grades, the tuition industry has not shown obvious signs of slowing down. In fact, this amount has grown steadily over the years, climbing from six hundred and fifty million Singapore dollars around fifteen years ago and S\$1.1 billion in 2012/13 to S\$1.4 billion in 2017/2018.

Tuition has become the dominant strategy in the education environment. The thinking is if other parents enrol their kids for tuition, it would be best also to do likewise so that their own kids will not lose out. The adopted attitude is cautious, preferring to continue with tuition if only as a form of insurance. In fact, it would still be better to enrol the kids even if other parents are not doing so. This will further ensure that they are ahead. Unfortunately, this results in parents enrolling their children for tuition even when they may already be excelling in school. Parents are spending hundreds of dollars every month, at times close to two thousand dollars, on private tuition. Interestingly,

parents are generally aware that extra classes may not actually significantly help push up their children's grades.

As reported in The Straits Times, the national newspaper, by Senior Education Correspondent, Ms Sandra Davie, on 4 July 2015, many children under seven are already attending extra classes every week just to brush up on their English and Maths. This is even before the children are attending formal school. A survey on five hundred parents was conducted by The Straits Times and research company Nexus Link and found that seven in ten enrolled their children in extra classes. For parents with children in primary school, nearly eight in ten parents paid for private tuition. More than six out of ten parents do so for their children in secondary school. More alarmingly, nearly forty per cent of parents surveyed admitted to having their pre-schooling children enrolled in tuition programmes. The top two reasons given for entering tuition programmes were to improve their children's grades and to help them keep up with others. For parents with children in primary school, seventy per cent surveyed said it was to improve grades, fifty-two per cent was to facilitate their children in keeping up with others. Only a third of the parents responded that the extra tuition actually improved their children's academic performance by "a noticeable extent". Mr Jack Loo, Nexus Link chief methodologist, pointed out that the survey clearly showed that parents sent their children for tuition is largely due to peer pressure and competition while hoping that grades will rise. This results in increased competition and thus fuelling the tuition industry. The survey also revealed that on the average, pre-school children attend two hours of tuition per week, while primary and secondary school students do three hours per week of tuition after school.

National examinations such as the Singapore-Cambridge General Certificate of Education examinations, both Ordinary and Advanced levels, and the Primary School Leaving Examination certainly add pressure for parents wanting their children to do well. Even at primary level where the child is twelve years old, parents see the Primary School Leaving Examination as a consequential exam which will decide the secondary schools and academic streams that their children will be entering.

Tuition centres are also providing in-house mid-year and end-of-year examinations, which are set by its tutors. This obviously provides parents with a gauge on their children's capabilities just prior to their school's examinations. Some tuition centres even make the availability of its in-house

examinations to students not enrolled with the centre. As such, anyone can sign up to take the examinations obviously for a fee.

Blackbox Research Pte Ltd conducted a survey and published a whitepaper in July 2012, entitled “Private Tuition in Singapore”. The survey showed that eighty per cent of Singaporeans really think that tuition helps students to do better in their education. Two-thirds (sixty-seven per cent) of Singaporeans have enrolled their children in tuition programmes at some point in time. Twenty-three per cent have the intention to do so in the near future. Only nine per cent of Singaporeans are averse to having their children in such tuition programmes. Fifty-one per cent of Singaporeans spend more than five hundred Singapore dollars a month per child on tuition fees. 1 in 3 Singaporeans think tuition should start when children are in pre-school. Forty-six per cent of Singaporeans think tuition is necessary simply to stay competitive with peers. Forty-three per cent of Singaporeans think it may be because parents simply want their kids to succeed in their education.

Interestingly, the Household Expenditure Survey shows that it is the higher-income families that are spending more on tuition. The top 20 per cent of households by household income spend nearly four times as much on tuition as those in the bottom 20 per cent. This is unsurprising as wealthier households are certainly in a better position to pay for tuition classes. However, this is certainly a worrisome situation as it can lead to increasing educational inequality between children from economically disadvantaged and those from advantaged backgrounds.

4.3.3 Conclusion

A global study by Pearson Education in 2017 revealed that Singapore’s education system is ranked 5th in the world. Ahead of Singapore are Finland, South Korea, Hong Kong, and Japan.

Singapore certainly put a very high emphasis on academic results to the extent that there is huge pressure on students to perform well on national and international examinations. In turn, tutors and classroom teachers are also pressured to prepare their pupils for the examinations. Singapore students often are given substantial amount of homework to practice what they have learned in class. Attending extra tuition classes is a common

occurrence in Singapore, resulting in the birth of a very lucrative tuition industry in the small island of Singapore as mentioned earlier.

Singapore uses both Western and Eastern methodologies in teaching with focus on delivering the curriculum. Classes are teacher-led and geared towards the acquiring of knowledge. This is followed by applying the knowledge learnt towards given problems and working towards obtaining correct answers. This is certainly done through numerous practice and repetition. As mentioned earlier in this thesis, Singapore emerges at the very top of the list for skill levels pertaining to Science and Maths subjects.

As can be seen, an obvious working system is in place and giving very positive results. However, here lies the challenge for Singapore of having students not only possessing a firm foundation in the knowledge of important subjects, but also acquiring positive characteristic qualities like critical thinking skills and learning how to collaborate and work effectively in a team environment. These are qualities which can nurture future entrepreneurs and subsequently, increasing the probability of more entrepreneurs expanding into international markets.

Quite naturally, the fear of failure breeds when placed in a results-oriented environment. As a result, students are results-driven, studying and working hard towards just obtaining the answers or solutions in mind. Clearly, a demonstration of the ends justifying the means. The fear of failure and being stigmatised is certainly an obstacle to entrepreneurship. It inhibits creative thinking and alienate the ambitions of overseas business expansions. Not surprisingly, most students take the safe route of joining the employment market, aided by the strong and increasing Foreign Direct Investments into Singapore.

4.4 Data Analysis on Survey Findings

Two surveys were conducted for this research. See Appendix A and Appendix B for both survey forms. The first survey, using the form in Appendix A, was conducted with non-entrepreneurs, age 21 to 35. This constitutes undergraduate students, postgraduate students and employees of companies and organisations. This survey was crucial to further understand the concerns of non-entrepreneurs when exploring the possibility of entrepreneurship as well as the constraints faced.

The second survey, using the form in Appendix B, was conducted with entrepreneurs or business owners of SMEs who have yet to enter the international markets and are only transacting within the local Singapore market. Aim of this survey was to comprehend the concerns and constraints faced by entrepreneurs and subsequently preventing expansion to markets outside Singapore.

4.4.1 Survey 1: Understanding the constraints faced and concerns of non-entrepreneurs when exploring the possibility of entrepreneurship

This survey was done using semi-structured in-depth questionnaires with open-ended questions. Where required and with permission from the participants, one-on-one interviews were conducted to further understand the answers provided to the questions that require further clarification. One merit of conducting surveys using semi-structured in-depth questionnaires with open-ended questions essentially is that it helps to explore and investigate further the experiences of the researched participants.

Using the form in Appendix A, the survey was conducted with 40 non-entrepreneurs, age 21 to 35. This constitutes undergraduate students, postgraduate students and employees of companies and organisations. This survey was crucial to further understand the concerns of non-entrepreneurs when exploring the possibility of entrepreneurship as well as the constraints faced.

4.4.1.1 Interest level in starting the entrepreneurship journey

While 38% of the participants were unsure of their interest level of starting an entrepreneurship journey, 20% had simply no interest. Only 4% expressed strong interest. This leaves the remaining 38% expressing interest but with conditions. 32% were interested if their earnings within 3 years are higher than being employed and only 6% were willing to wait out for 5 years. Financial concerns were apparent here for those who were interested and made more challenging with the given timeline to themselves. Including the 38% who were unsure, this first question certainly sparks off more to be researched to enhance our understanding. See Figure 4. It was certainly not encouraging that only 4% shows strong interest to journey into entrepreneurship.

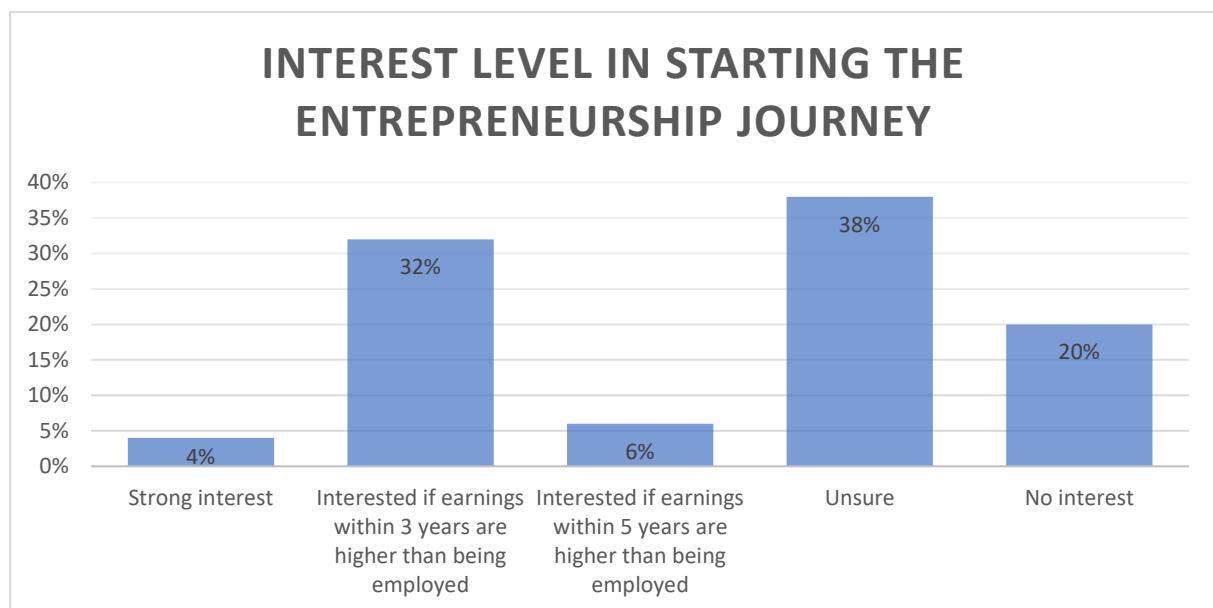


Figure 4: Interest level in starting the Entrepreneurship journey

4.4.1.2 Is there a culture of entrepreneurship in Singapore

Participants were asked for their opinions if there is a culture of entrepreneurship in Singapore. Of the 74% who were of the view that the culture of entrepreneurship is not evident or present, 31% were strong in their view of the culture being absent. Only 16% were of the opinion that there is still a culture of entrepreneurship. Note that out of this 16%, only 7% gave a ‘strong yes’ while the response of the remaining 9% was ‘somewhat yes’. See Figure 5.

Note that these are views of the participants aged 21 to 35. Participants were undergraduate students, postgraduate students and employees of companies and organisations. It is certainly discerning that almost three-quarter of the participants view a lack of entrepreneurship culture in their midst. Understandably, this discourages entry into entrepreneurship for these participants.

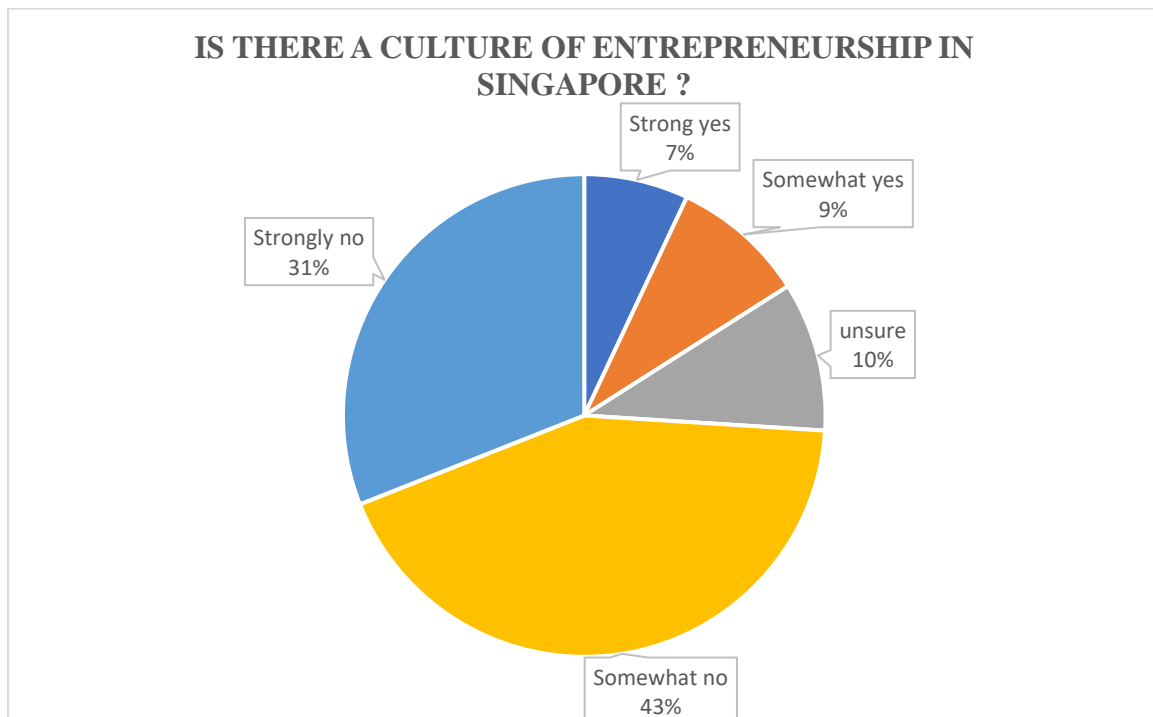


Figure 5: Is there a Culture of Entrepreneurship in Singapore

4.4.1.3 Willingness to work longer than 12 hours per day

Figure 6 below shows only 20% were willing to work longer than 12 hours per day. While 34% were not willing, 46% put preference to a work-life balance. This is an obviously vital question to address when starting an entrepreneurship journey where time investment is crucial and may actually determine the rate or probability of success.

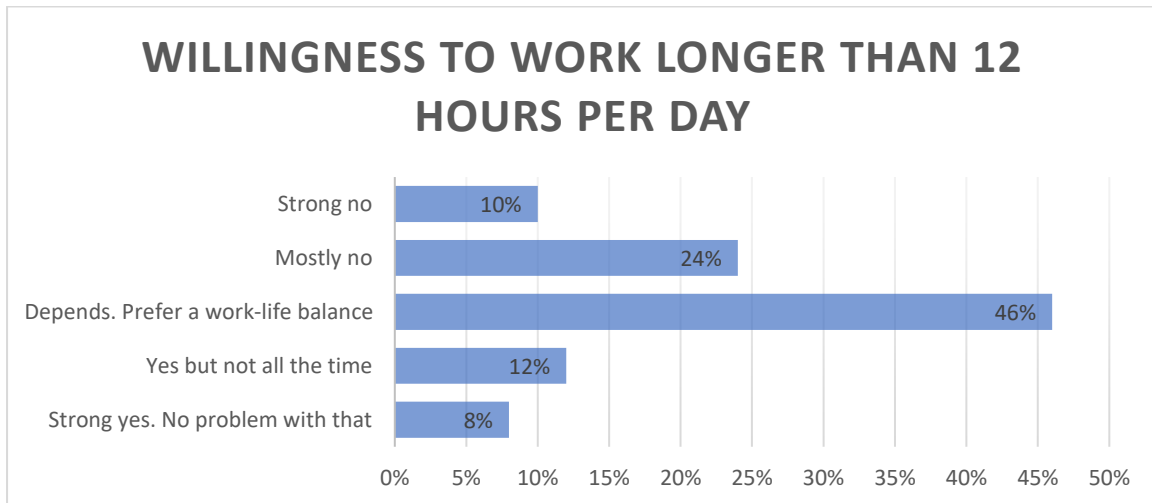


Figure 6: Willingness to work longer than 12 hours per day

4.4.1.4 Confidence of financial resources to start a business

Figure 7 below shows 14% of the participants not being confident of their financial resources to start a business. However, more concerning are the 72% participants responding having insufficient financial resources as simply the key reason for not starting a business. It becomes no longer a financial confidence issue but simply needing financial facilitation. Thus, we explored and researched on the available government incentives and programs promoting entrepreneurship as shown in Chapter 4.2 and will be discussing further in the next chapters as well as providing recommendations on these government incentives and programs. Hopefully, this will facilitate in providing more financial resources to anyone aspiring to be an entrepreneur. Perhaps, when this same question is asked again in a survey, we will then be able

to get a significantly lower value than 72% which certainly stands out as a concerning figure in this survey.

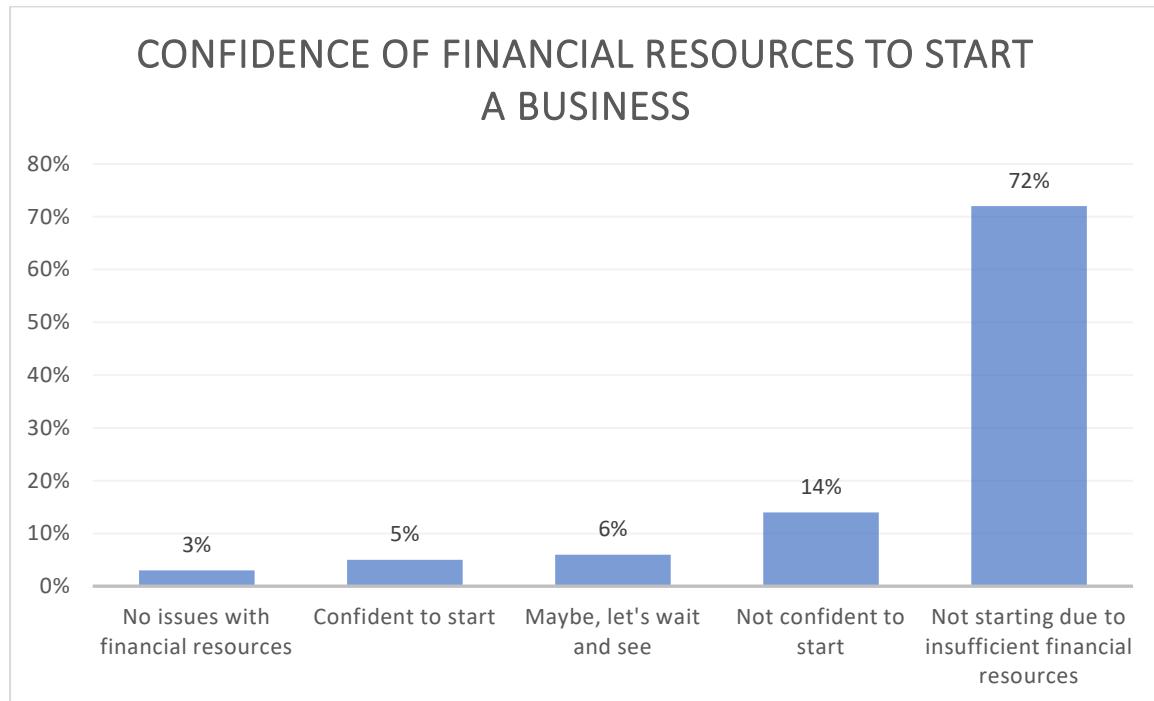


Figure 7: Confidence of Financial Resources to start a business.

4.4.1.5 Having necessary skills and knowledge to start a business

78% of the participants responded as simply not having the necessary skills and knowledge to start a business. 14% have not even given much thought and reflection if they have the necessary skills and knowledge. See Figure 8 below. This data certainly warrants further discussions in the next chapters as well as providing recommendations to facilitate the education of entrepreneurial skills and knowledge. It is discerning that 78% of the interviewees described themselves as simply not knowing how to start a business. However, this is not surprising especially after we have explored and researched the education system of Singapore in Chapter 4.3. This result also echoes our findings as shown in Figure 5 where 74% of the participants were of the view that the culture of entrepreneurship is not evident or present,

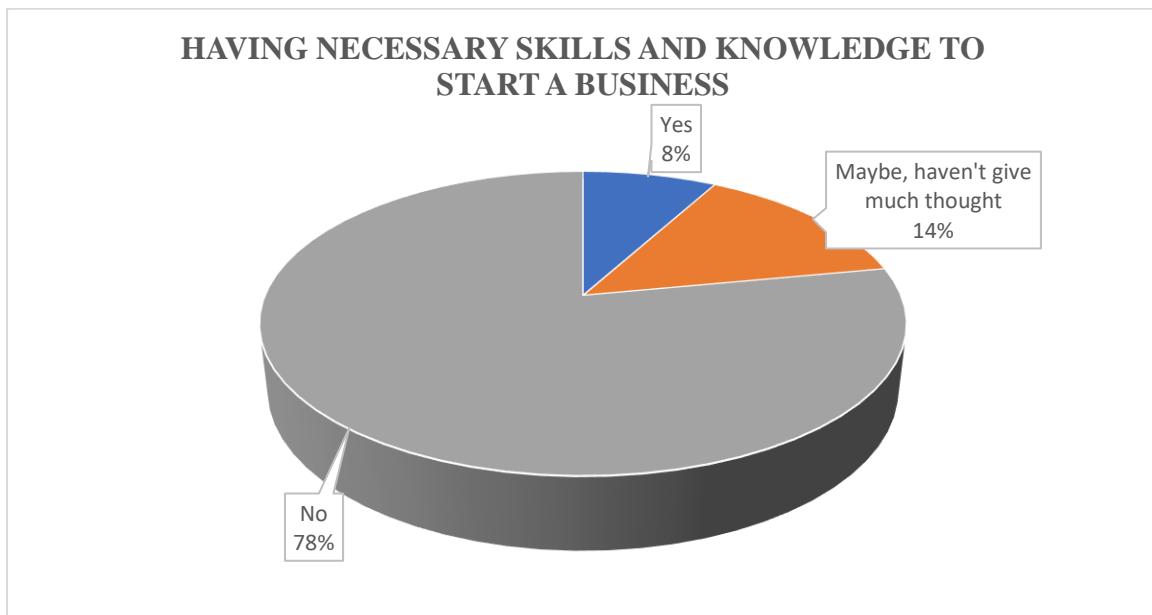


Figure 8: Having necessary skills and knowledge to start a business

4.4.1.6 Are the financial resources and institutional support provided by the government and private sector sufficient for business startup

In this survey, we wanted to quantify the participants' view if the financial resources and institutional support provided by the government and private sectors are sufficient for business startups. Only 10% felt that they were at least mostly sufficient. 46% of the participants responded as absolutely insufficient while 34% responded mostly insufficient. See Figure 9 below. This correlates with the earlier findings as shown in Figure 7 where 14% of the participants were not confident of their financial resources and 72% of the participants responding simply having insufficient financial resources in starting a business. Thus, the research done in Chapter 4.2 on the available government incentives and programs promoting entrepreneurship is vital, exposing their limitations and the subsequent need for more to be done.

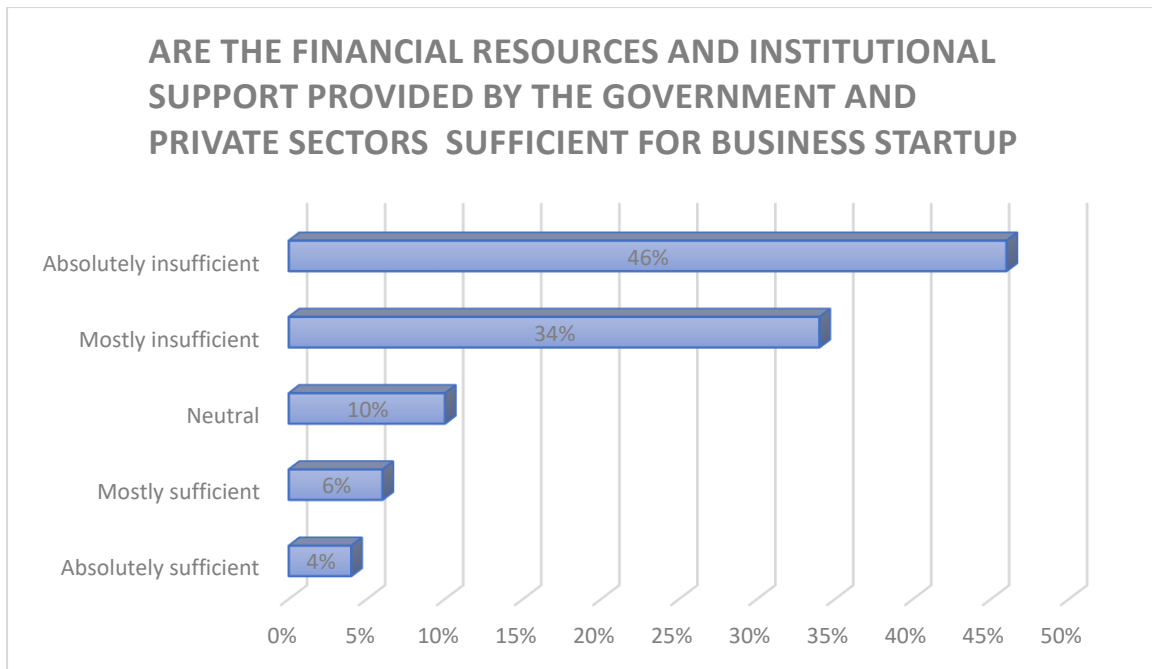


Figure 9: Are the Financial Resources and Institutional Support provided by the government and private sector sufficient for business startup

4.4.1.7 Fear of Failure prevents individuals from Full-time Entrepreneurship

Figure 10 shows 70% of the participants agreeing that the fear of failure can be a reason preventing individuals from entering full-time entrepreneurship. Interestingly, an encouraging 22% think otherwise while 8% were neutral. It is with no surprise the meritocratic environment of Singapore comes as a double edge sword. While encouraging and pushing for success, it also comes with the fear of failure. Unfortunately, the social stigma of being labelled a failure is still evident in the Singapore society. Thus, this fear of failure results as an obstacle for entry into entrepreneurship journey.

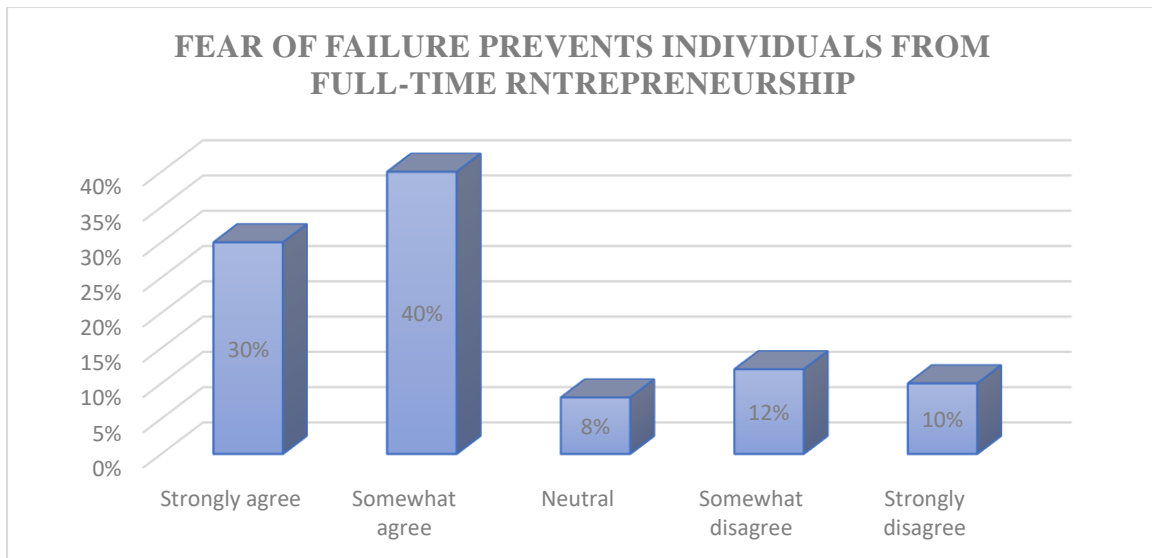


Figure 10: Fear of Failure prevents individuals from Full-time Entrepreneurship

4.4.2 Survey 2: Understanding the constraints faced and concerns of small and medium enterprises (SMEs) in Singapore when seeking international markets

This survey was done using semi-structured in-depth questionnaires with open-ended questions. Where required and with permission from the participants, one-on-one interviews were conducted to further understand the answers provided to the questions that require further clarification. One merit of conducting surveys using semi-structured in-depth questionnaires with open-ended questions is that it explores in more detail the experiences of the researched participants.

Using the form in Appendix B, the survey was conducted with 30 entrepreneurs or business owners of SMEs who have yet to enter the international markets and are only transacting within the local Singapore market. Aim of this survey was to comprehend the constraints faced and concerns of SMEs in Singapore when seeking international markets and subsequently preventing their expansion to markets outside Singapore. The participants in this survey

certainly understood the potentials and financial benefits of entering overseas markets. They acknowledged the obvious risk involved and accepted the competition that follows.

4.4.2.1 Familiarity with Legal and Regulatory requirements of overseas business

Being familiar with the legal and regulatory requirements of a foreign country is certainly a prerequisite before entering its market. Yet, in this survey, only 20% of the participants could comfortably say yes to being familiar. 25% were completely not familiar while half of the participants were somewhat familiar but admitted that they should be finding out more. Glad to know that these 50% realised the importance of first having complete familiarity. From this finding alone, we are already aware the urgency of SMEs having to be equipped confidently before even they consider entering a targeted international market. Perhaps this is one of the reasons why they have yet to enter the international markets and are only transacting within the local Singapore market.

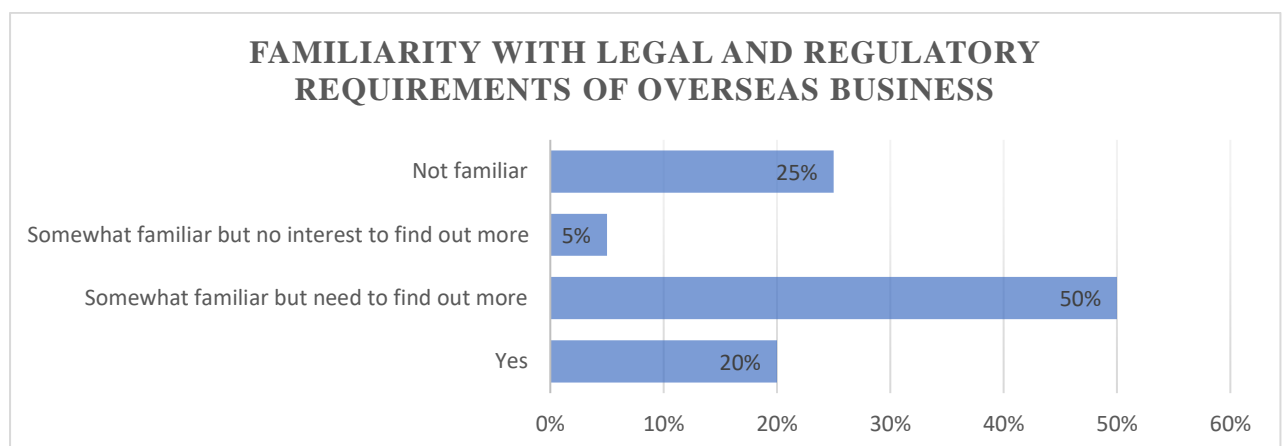


Figure 11: Familiarity with Legal and Regulatory requirements of overseas business

4.4.2.2 Conducted market research for potential overseas markets

This was a concerning finding among the SMEs surveyed. 42% of the participants have not done any market study on their targeted international markets. 38% considered themselves as having done some research but admitted to not being focused and detailed in their research yet.

Only 20% of the participants considered themselves as having done the necessary research but have yet to enter any overseas market.

For the 80% who have not done their research or some research but nothing concrete yet, there was no intention to explore or enter any international market but only to stay in the local domestic market at the point of the survey. A few reasons emerged and these include financial limitations for overseas expansion, familiarity level of the overseas operations, feeling sufficient to just stay in the local domestic market as they already have their hands full.

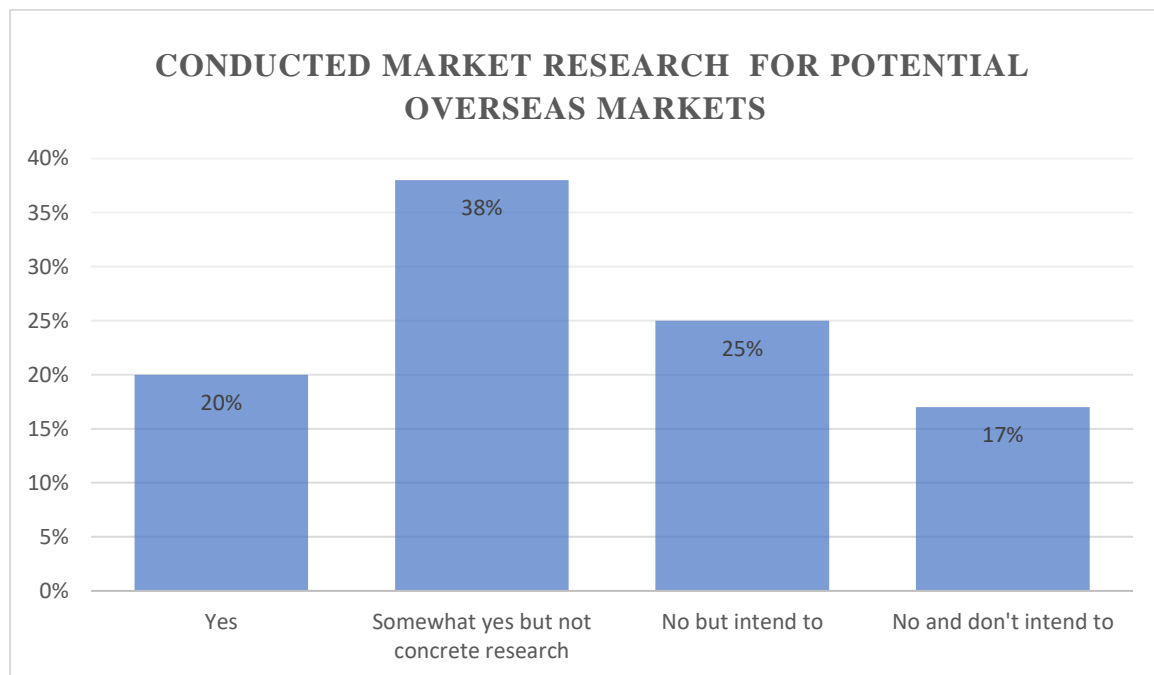


Figure 12: Conducted Market Research for potential Overseas markets

4.4.2.3 Having financial resources for overseas expansion

Only 12% of the participants considered themselves to have sufficient financial resources for overseas expansion. 23% were unsure if they have adequate financial resources as they have not even started exploring the possibility of overseas expansion. It was concerning to know that 65% of the participants considered themselves to have insufficient financial resources to even

consider expanding overseas. In the next chapter, we will further discuss on this and provide recommendations pertaining to financial facilitations for SMEs to expand overseas while referencing to the current facilitations from government incentives and programs as mentioned in Chapter 4.2.

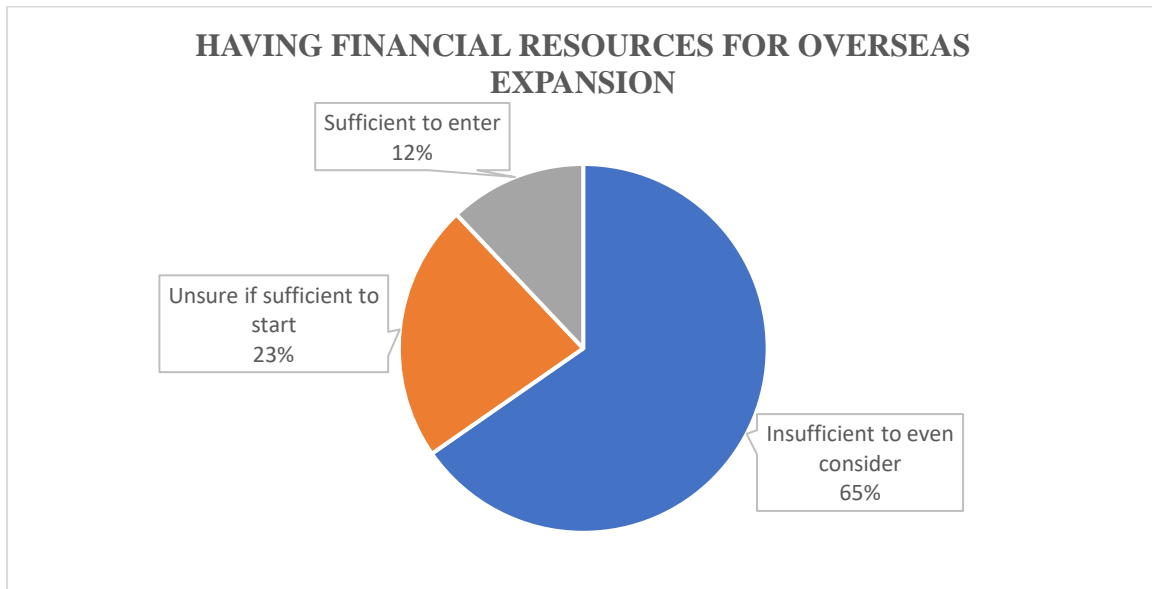


Figure 13: Having financial resources for overseas expansion

4.4.2.4 Having the necessary skills and knowledge to enter a foreign market

Figure 14 shows 38% of the participants considering themselves as not having the necessary skills and knowledge to enter an international market. 54% claimed to have some having some level of skills and knowledge but admitted to not fully enough to actually make the move outside their comfort zone. Obviously, they all stayed only within the local domestic market. Only 8% replied positively to this survey question and this is just too small a percentage which is concerning.

It is vital that SMEs equip themselves with adequate skills and know-how before embarking into any international market so that they can have the optimal chances of sustainability and

success when overseas. From this survey, we can see there is no definitive attempt to find out more with regards to entering an overseas market. As such, this leads to no definitive intention to break out of the domestic market. In the next chapter, we will attempt to provide viable recommendations to address this shortcoming.

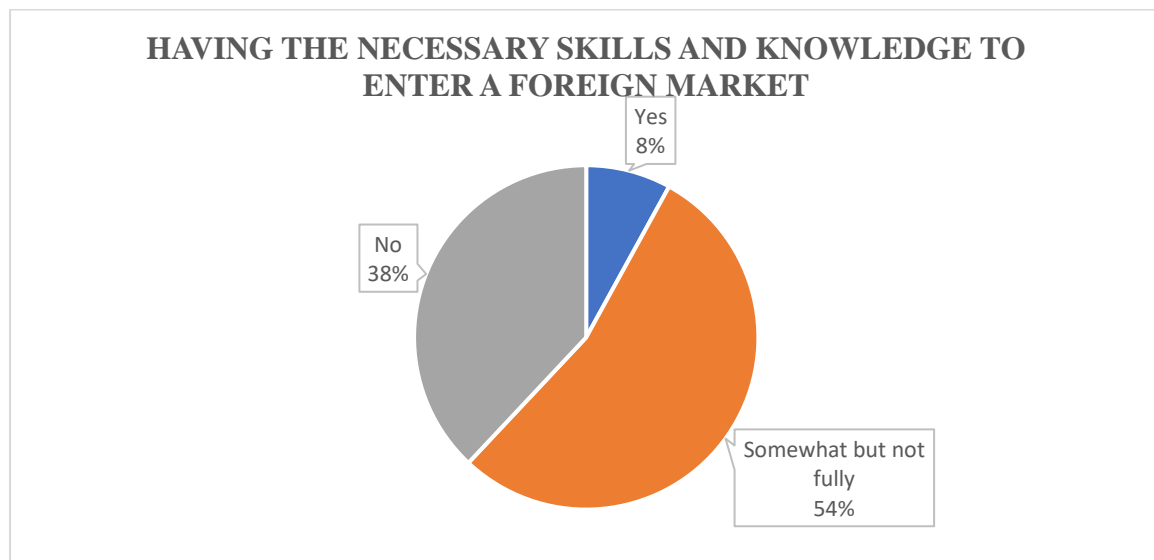


Figure 14: Having the necessary skills and knowledge to enter a foreign market

4.4.2.5 Awareness of government programs supporting international business expansion

This was a very vital survey question as the survey result further supports the need to revisit the current government programs facilitating SMEs in their international business expansion. 92% of the participants were actually aware of the availability of such programs. However, out of these 92% of participants, 45% have applied but were never successful in their applications and 47% have never applied though they were aware of the availability of such programs. Only 8% were not aware of the availability of such programs. It is not surprising that 45% of the participants who applied were not successful in obtaining the stated grants. As shown in Chapter 4.2, there are conditions and criteria to be satisfied before the grants can be given out. SMEs, especially the smaller sized SMEs, will find it a challenge to meet these conditions and criteria.

Of the 47% who have never applied but were aware of the programs, the reasons given were that they felt they would not be granted after understanding the conditions and criteria as well as not wanting to be subjected to the regular audit on their progress. In the next chapter, we will certainly provide recommendations for modifying and improving the current available programs and where required, propose completely new programs to aid SMEs in their forays into their targeted international markets. Ultimately, the goal is to facilitate these SMEs and optimize their chances of success overseas.

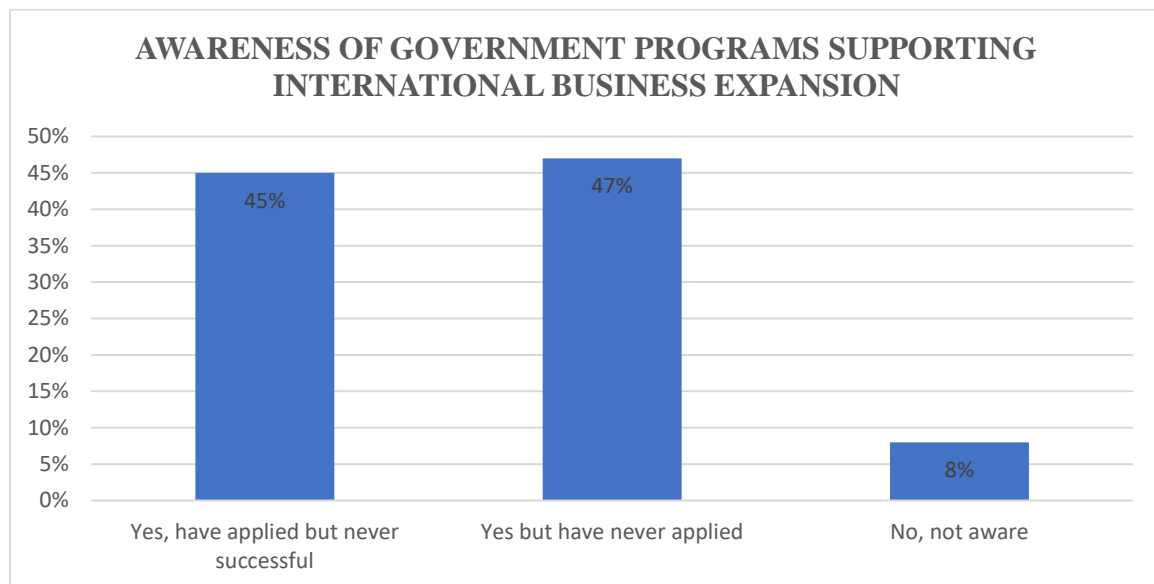


Figure 15: Awareness of government programs supporting international business expansion

4.4.2.6 Adequacy of Government Programs supporting Overseas expansion

Only 8% of the participants expressed that the government programs supporting SMEs in their overseas expansion are adequate. An alarming 70% simply put it down as insufficient. 22% of the participants felt they were somewhat sufficient but haven't given much thought and research into them. Once again, referencing our secondary data in Chapter 4.2, it is not surprising that

70% of the participants find the current government programs insufficient. Clearly there is a need to revisit and modify the current available government programs, thereby facilitating SMEs in their successful international business expansion.

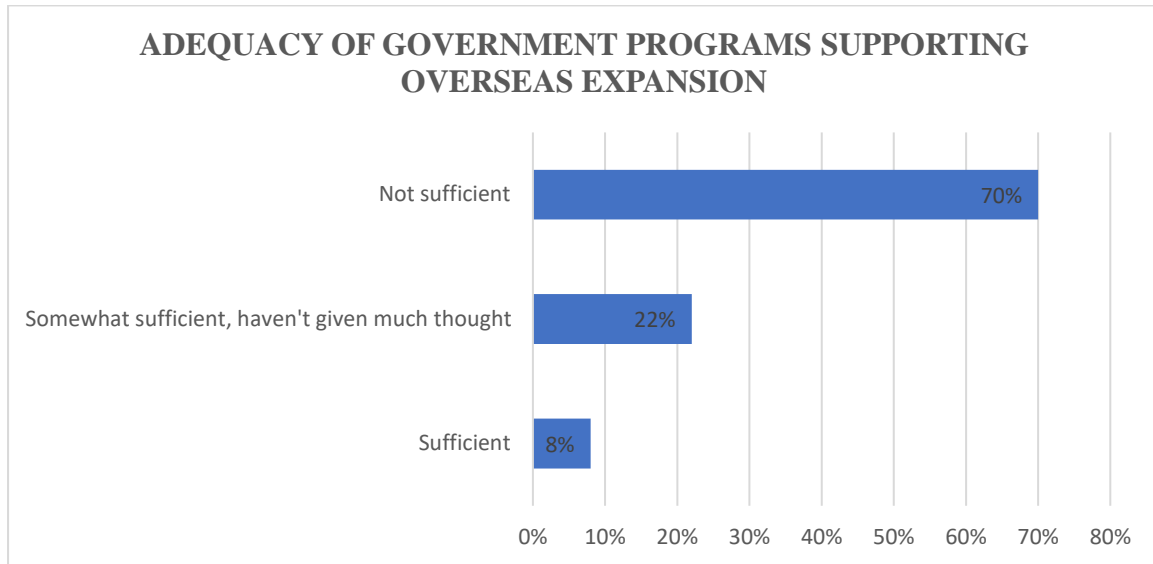


Figure 16: Adequacy of Government Programs supporting Overseas expansion

4.5 Triangulation of the Results

Triangulation is vital as it enriches the study. Using results obtained from the semi-structured exploratory survey questions and interviews, documents from the literature review and mined secondary data, triangulation helps to increase the credibility and validity of our findings. The triangulation strategy of using multiple approaches encourages many methods for collecting data and facilitates validation of the data collected through cross verification from more than 2 sources and thereby verifies the consistency of findings, according to Denzin (1970).

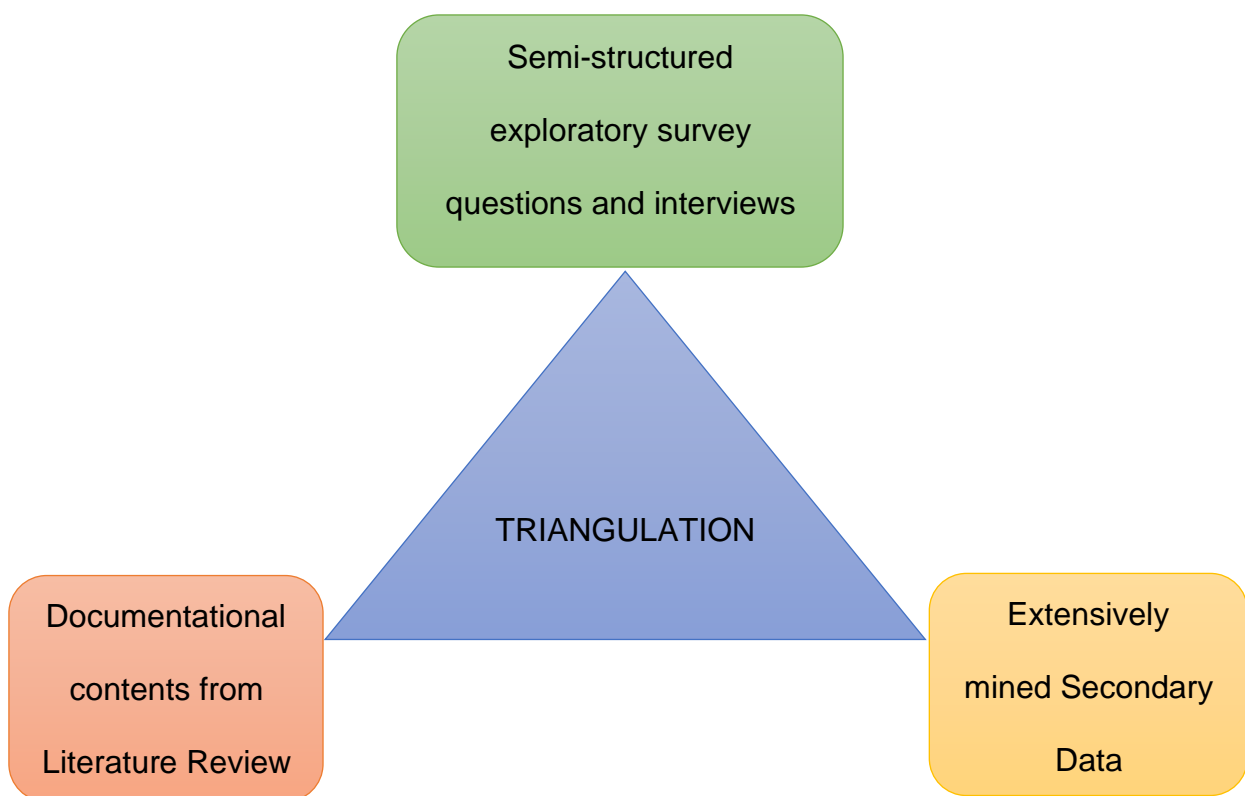


Figure 17: Triangulation of Findings

Two surveys were done using semi-structured in-depth questionnaires with open-ended questions. Where required and with permission from the participants, one-on-one interviews were conducted to further understand the answers provided to the questions that require further clarification. One merit of conducting surveys using semi-structured in-depth questionnaires with open-ended questions is it helps to examine in detail the experiences of the researched participants. The first survey, using the form in Appendix A, was conducted with 40 non-

entrepreneurs, age 21 to 35. This constitutes undergraduate students, postgraduate students and employees of companies and organisations. This survey was crucial to further understand the concerns of non-entrepreneurs when exploring the possibility of entrepreneurship as well as the constraints faced. The second survey, using the form in Appendix B, was conducted with 30 entrepreneurs or business owners of SMEs who have yet to enter the international markets and are only transacting within the local Singapore market. Aim of this survey was to comprehend the concerns and constraints faced by entrepreneurs and subsequently preventing expansion to markets outside Singapore. The participants in this survey certainly understood the potentials and financial benefits of entering overseas markets. They acknowledged the obvious risk involved and accepted the competition that follows.

Data obtained from the survey findings are evaluated using methods that are consistent with the qualitative exploratory approach. It is then validated through the literature review, in other words, involving the review of documents related to the study's literature, in particular its similarities. Literature review done actually breaks down into 5 segments. Namely, importance of small and medium enterprises to society and the economy, benefits for small and medium enterprises entering international markets, challenges to address for the sustainability of small and medium enterprises in Singapore, an entrepreneurial culture in Singapore is the essence for the successful establishment of small and medium enterprises, challenges of entering international markets for small and medium enterprises in Singapore.

A thorough mining of secondary data was done, including, but not limited to, research documents, media reports, government publications, public information. This data is used to cross-check, validate and affirm our survey findings as well as the review of our literature. As shown in chapters 4.2 and 4.3, extensive data mining was done on the education system in Singapore as well as government incentives and programs to promote entrepreneurship.

4.5.1 Correlation of Literature Review to Survey 1 Findings

Survey results in chapter 4.4.1.7 shows 70% of the participants agreeing that the fear of failure can be a reason preventing individuals from entering full-time entrepreneurship. It is with no surprise the meritocratic environment of Singapore comes as a double edge sword. While encouraging and pushing for success, it also comes with the fear of failure. Unfortunately, the

social stigma of being labelled a failure is still evident in the Singapore society. Thus, this fear of failure results as an obstacle for entry into entrepreneurship journey. This goes in parallel with Hameed et al. (2019) pinpointing the obvious that he/she should not shun failure and to continually learning from his/her surroundings with a positive attitude. An obvious point yet seldom practised, thus worthy of reiteration. It is quite natural that entrepreneurs have taken into consideration the risks involved and these risks are related to career opportunities, family relationships, physical health status as well as financial well-being. As such, the appetite of risk-taking for any individual who is considering being an entrepreneur is vital for his/her decision-making process. Surely there are qualified people but apparently preference is towards working as employees rather than to be an entrepreneur. This momentum is further not helped by the insights shared from social interaction and from seniors and peers. Unfortunately, experienced entrepreneurs are not sharing enough of their entrepreneurship journey with newcomers.

Nyanama (2021) writes that for entrepreneurs to emerge convincingly within a culture, they must be granted social acceptance within their communities. In this way, the activities associated with their new business ventures can be easily accepted as legitimate and socially beneficial. Without this acceptance, it is very unlikely that entrepreneurs would emerge. Nyanama (2021) then implies that for entrepreneurs to emerge compellingly, the culture of risk and rewards at the national level must be developed. This certainly applies to the entrepreneurial landscape in Singapore where more needs to be done to enhance the local entrepreneurial culture.

In chapter 4.4.1.5, survey results show that 78% of the participants responded as simply not having the necessary skills and knowledge to start a business. 14% have not even given much thought and reflection if they have the necessary skills and knowledge. This data certainly warrants the need to facilitate the education of entrepreneurial skills and knowledge. It is discerning that 78% of the interviewees described themselves as not knowing how to start a business. However, this is not surprising especially after we have explored and researched the education system of Singapore in Chapter 4.3. This result also echoes our findings as shown in the survey results of chapter 4.4.1.2 where 74% of the participants were of the view that the culture of entrepreneurship is not evident or present. Note that these are views of the participants aged 21 to 35. Participants were undergraduate students, postgraduate students and employees of companies and organisations. It is certainly discerning that almost three-quarter of the

participants view a lack of entrepreneurship culture in their midst. Understandably, this discourages entry into entrepreneurship for these participants.

What is more worrying is when some of them do decide to enter entrepreneurship without having the mentioned necessary skills and knowledge to start a business. As Karadaq (2015) has mentioned, SMEs are mainly reported to exhibit an inadequate use of new technologies, a lack of business-related training like preparing business plans, inadequate managerial capabilities. As such, SMEs face various challenges including sustainability of their domestic businesses and this is even before they can consider overseas expansion.

In addition, to attain sustainability, Waware (2024) reiterates the importance of SMEs having strong perseverance when facing setbacks by exploring bold approaches of combining their current resources and innovating their business in terms of strategy and technology. Such behaviour and mindset characterized by optimism, tenacity, and efficacy is vital in the effective dealing of challenges and setbacks. SMEs must continue to assert a competitive mentality, exhibiting adaptability and ingenuity to quickly identify and capitalise on opportunities that may arise during a crisis. When an entrepreneur exhibits resilience, consumers tend to perceive the sustainability practices of the organisation and its leadership. This leads to their positive perception of the brand's strength and enhances their intention to continue doing business with the organisation.

According to Volkmann et al. (2009), entrepreneurial skills and behaviour can actually be taught and learned. However, it has become imperative that entrepreneurship education is lifelong, it must be ongoing from youth and throughout adulthood. Volkman et al. (2009) commented that major corporations are also providing opportunities for entrepreneurship education. For example, Microsoft has been sponsoring a wide variety of IT-related entrepreneurial programmes. Successful entrepreneurs and business professionals have also been invited to be mentors, and coaches for the students. Mentors play a key role in incubating student businesses. Leveraging from the writings of Volkmann et al. (2009), this is certainly lacking in Singapore. One suggestion at this point will be for government-linked companies (GLCs) and established SMEs in Singapore to be more involved in the entrepreneurship education of students and adults, both in the area of financial sponsoring as well as the transfer of knowledge and know-how. In addition, many development agencies such as the United States

Agency for International Development (USAID), the Norwegian Agency for Development Cooperation (NORAD) and the Swedish International Development Cooperation Agency (SIDA) have made the areas of youth development and entrepreneurship strategically important as priorities for funding. This is also one area the Singapore government needs to look into and prioritise on.

The writings of Hameed et al. (2019) reiterate survey results of chapters 4.4.1.5 and 4.4.1.2. Hameed et al. (2019) brings out the topic of conducting entrepreneurship courses in universities where students will be taught entrepreneurial concepts and skills as well as guided with practical activities. They should learn how to identify opportunities and design the solutions. Cao et al. (2011) suggested a niche market strategy for the Chinese SMEs. Focusing on the niche market allows the Chinese SMEs to only supply specialized products. Besides providing the option of choosing margin over volume, these Chinese SMEs can minimise their usage of the foreign language and dwell less into the foreign culture. The Chinese SMEs can outsource their marketing, administrative and operations functions to other business partners while they continue to build their core competencies pertaining to their niche products or services. Targeting a niche market is certainly an essential awareness to be included during the process of entrepreneurship education. Business schools usually teach students how to be a good manager in an organisation instead of directing them on how to be business leaders and overcoming risky situations. Hameed et al. (2019) was more pressing in mentioning the growing issue of the lack of entrepreneurship education in the schools and for the state to increase more subjects pertaining to entrepreneurship to be compulsorily taught to students. Hopefully, students will be motivated to think about starting small businesses. Ultimately, the government must appreciate the values provided by small businesses and foster them through governmental laws and policies.

Jenifer et al. (2015) recommends basic cross-cultural training especially for new employees. This cross-cultural awareness should also be included when providing entrepreneurial education in schools. There is certainly a need to move away from thinking about one's own culture as well as own group behaviour as the benchmark against all the other groups. A person's own cultural experience inadvertently makes him or her feel that his or her culture is distinctive and subsequently the inability to appreciate other cultures' differences while increasing the level of anxiety. Globalization has increased the density of connections. As such,

Beier et al. (2016) argued that social relationships are connected to the internationalization of SMEs in various ways and the way it is being developed. Having wide networks and strong relationships with external partners can help SMEs to enter into foreign markets more successfully.

Hameed et al. (2019) encourages continual discussion on the design of entrepreneurship education. This must be an ongoing process so the process of educating entrepreneurship is always improving. Ultimately, the students benefit in their understanding of the important attributes and key areas of entrepreneurship. Universities should plan their entrepreneurial courses that aim to develop entrepreneur thinking and behavioural skills in a student's personality. The notion of entrepreneurship is certainly lacking in Singapore's education system, perhaps non-existent is a more accurate description. There is certainly an urgency to implement entrepreneurship education into Singapore's education system perhaps even prior to the students' entering universities. Not surprisingly, survey results of chapter 4.4.1.1 show 38% of the participants being unsure of their interest level of starting an entrepreneurship journey, 20% had simply no interest. Only 4% expressed strong interest. This leaves the remaining 38% expressing interest but with conditions. Of these 38%, 32% were interested if their earnings within 3 years are higher than being employed and only 6% were willing to wait out for 5 years.

Majority of the Singaporeans, particularly the university graduates, prefer the career path as employees of organisations rather than being entrepreneurs (Tan, 2014). The typical Singaporean working adult still finds it safer and more attractive to work for a company and strive to be a successful manager or employee than to venture a start-up. Once again, it was not surprising that the survey results of chapter 4.4.1.1 show 32% were interested in entrepreneurship only if their earnings within 3 years are higher than being employed and only 6% were willing to wait out for 5 years. Financial concerns were apparent here for those who were interested and made more challenging with the given timeline to themselves. To further support writings of Tan (2014), a survey was done pertaining to the willingness of participants to work longer than 12 hours per day. Survey results show that only 20% were willing to do so. While 34% were not willing, 46% put preference to a work-life balance. This is an obviously vital question to address when starting an entrepreneurship journey where time investment is crucial and may actually determine the rate or probability of success.

Hameed et al. (2019) writes that risk taking propensity is one of the characteristics to be considered for a successful entrepreneur to have. The propensity to take risk is the degree to which an individual responds to the risk. In other words, how much risk he or she can take. Entrepreneurs take risk of their finances, well-being and even their emotional states. This risk-taking propensity therefore differentiates an employee from an entrepreneur. In chapter 4.4.1.6, a survey was done to quantify the participants' view if the financial resources and institutional support provided by the government and private sectors are sufficient for business startups. Results show that only 10% felt that they were at least mostly sufficient. 46% of the participants responded as absolutely insufficient while 34% responded mostly insufficient. Subsequently, in chapter 4.4.1.4, survey results show that 14% of the participants not being confident of their financial resources to start a business. However, more concerning are the 72% participants responding having insufficient financial resources as simply the key reason for not starting a business. It becomes no longer a financial confidence issue but simply needing financial facilitation. Better and more financial resources to anyone aspiring to be an entrepreneur can certainly increase the risk appetite reduce, increasing his or her propensity to take risk.

Pertaining to chapter 4.4.1.6 again, perhaps the Singapore government needs to reconsider their current top-down approach, making the necessary adjustments to the current institutional supports so as to promote a stronger entrepreneurial culture. Certainly, capitalism that is state-managed is not a favoured environment for SMEs to dwell in. Guo et al. (2016) compares Singapore with Switzerland just to demonstrate that the balance is imperfect between the market and the state. Small states succeed if they are able to negotiate successfully the demands of politics, international forces and domestic factors but with a flexible market mechanism. However, having a state that puts itself as a centralised unit and with high political control (referring to Singapore) provides more challenges in encouraging an entrepreneurship culture versus a liberal and corporatist state exhibiting bottom-up approach to governance (referring to Switzerland). Practising direct democracy, Switzerland has a bottom-up approach to policy making. This ensures legitimacy based on consent and participation, through the mediation of Cantons and citizens as well as competition among the Cantons, resulting in the inbound of research and education investments. By contrast, Singapore concentrates on a legitimacy whereby the government retains the final say as a result of a top-down approach to policy making while running a state-managed capitalism. Unfortunately, this creates the perception of over-regulation on the part of the government, resulting in discontent over regulations and their

implementation. The most frequent complaint pertaining to regulations is the costs of fees and licenses that businesses are required to pay and the manner in which regulations are implemented. Regulations are implemented with focus on enforcement and compliance (Tan, 2014). While there is an array of infrastructure support, there are not many government assistance schemes directly addressing the needs of start-ups. Obviously bureaucratic in their approach, policy makers also have to overcome the challenge of government agencies being viewed as bureaucratic. Entrepreneurship development agencies should not be only emphasising only on growing firms with potential as this may result in SMEs having the idea that the government is only picking firms with winning potential. As such, they may be discouraged to utilise the infrastructure (Tan, 2014).

Tan (2014) commented that the bankruptcy law was notably amended in 1995 in order to enhance Singapore's entrepreneurial climate. For debts below five hundred thousand Singapore dollars, the Official Assignee may grant a discharge after the bankrupt has spent at least three years in bankruptcy. This is of course after taking into account the reason and period of bankruptcy, amount of repayments already made, the bankrupt's remaining assets and behaviour during the bankruptcy. Tan (2014) reiterated that even with this amendment which creates a conducive climate for entrepreneurship as well as facilitates responsible risk-taking, this is only but a small step in the direction of addressing the issue of shunning business failure. As such, the typical Singaporean worker understandably finds it more attractive to be a successful manager or employee than to risk venturing a start-up.

Deriving from the Global Entrepreneurship Monitor framework, the largest annual international research initiative that collects and analyses entrepreneurship data, Gomulya et al. (2015) surveyed the entrepreneurial landscape in Singapore and discovered that while more people are contemplating to start new businesses in Singapore, there are still various challenges to overcome, in particular providing entrepreneurial education as well as improving the ability to innovate and differentiate products and services. The 2015 Entrepreneurial Activity Prevalence Rate (TEA) for Singapore was 11.6%. This was slightly more than half of the total Entrepreneurial Intention rate of 21.4%. This shows that there is still a significant gap between entrepreneurial intentions and actual participation in entrepreneurial activities. Gomulya et al. (2015) argued that this could be due to the lack of perceived skills among the local respondents.

Gomulya et al. (2015) supported for more education and training programmes to be introduced so as to raise the level of entrepreneurial knowledge and skill sets among Singaporeans.

4.5.1.1 Facilitation from Secondary Data: Education System in Singapore

In 2010, the then British education minister Michael Gove commended the education system of Singapore which has been credited as “world-leading”. A global study by Pearson Education in 2017 ranked Singapore’s education system as 5th in the world. The Singapore government on the average allots a significant twenty percent of its annual budget into the development of educational institutes and this is managed by the Ministry of Education. The Ministry of Education aims to have every child achieving a minimum of primary education and this has been made an abiding law under the Compulsory Education Act, enacted in 2000. It is a criminal offense if parents fail to enroll their children in schools at the right age. Not surprisingly, foreign students, especially from China and India, regard Singapore as a preferred destination for higher studies, in particular for admission into various technical and business schools which offer industry-oriented courses. With English as the main language of instruction, it is no wonder that Singapore is attracting a wide arena of international students.

Singapore is well-known for its students’ stellar performance in mathematics and science. The study conducted in 2019 by Trends in International Mathematics and Science Study (TIMSS) revealed that both primary and secondary level Singaporean students have come out top in rankings for both science and mathematics subjects. The influential Programme for International Student Assessment (Pisa), run by the Organisation for Economic Co-operation and Development (OECD) and taken every three years, provides education rankings pertaining to international tests in mathematics, science and reading taken by 15-year-olds in more than seventy countries. In 2016, Singapore was rated first for mathematics, reading and science with its teenagers coming top in tests for the 3 assessing factors. OECD education director, Andreas Schleicher said Singapore was "not only doing well but getting further ahead". Perhaps, while the education system clearly pushes for academic excellence, it has also conditioned Singaporeans to be more risk averse and take a more stable and safer path of employment especially with good-paying jobs?

Singapore Management University's Professor Chung Wai Keung was unapologetic in his interview which was published in the national newspaper, The Straits Times, on 6 April 2011, entitled, "Our risk-averse culture hinders social mobility". Professor Chung pointed out that there is a risk averse culture in Singapore and it is weighing down its social mobility, thereby discouraging entrepreneurship. This is unfortunate as entrepreneurship is a means for the low-income population to scale the social hierarchy. He mentioned that while the government was intrinsic when encouraging Singaporeans to take risks, the whole system has been discouraging to students from doing so. Children were told by their elders to be diligent in their studies from young and to excel academically is the utmost measure of success. They did so obligingly, and it is only natural that students accept the rationality of just finding a job after leaving school as a norm. In this environment, they were conditioned to advance in their academics as high as they can as this path is perceived as a safe route to take. Progressively, students become reluctant to try out unconventional ideas for fear of failure. This is not surprising as they are taught almost in a binary manner where there is a correct and not correct way of doing things. Professor Chung reiterated the need to figure and draw out a comprehensive plan on how to provide training to students for jobs that will be existent 10-15 years later. According to him, university graduates here having safely cleared all the academic hurdles, tend to be "conformists". Most would pick a "routine life" of paid employment over striking out on their own. In so doing, he says, they sacrifice the chance to leapfrog increasingly rigid social hierarchies.

As such, it is certainly not surprising that survey results in chapter 4.4.1.7 show 70% of the participants citing the fear of failure as a reason preventing individuals from entering full-time entrepreneurship. The meritocratic environment of Singapore comes as a double edge sword. While encouraging and pushing for success, it also comes with the fear of failure. Unfortunately, the social stigma of being labelled a failure is still evident in the Singapore society. Thus, this fear of failure results as an obstacle for entry into entrepreneurship journey. Subsequently in chapter 4.4.1.5, survey results show that 78% of the participants responded as simply not having the necessary skills and knowledge to start a business. This data certainly warrants the need to facilitate the education of entrepreneurial skills and knowledge. This result also echoes our findings as shown in the survey results of chapter 4.4.1.2 where 74% of the participants were of the view that the culture of entrepreneurship is not evident or present.

The Department of Statistics of Singapore conducted the Household Expenditure Survey from October 2017 to September 2018 and found that Singapore households spent S\$1.4 billion on tuition. The tuition industry has expanded over the years, with tuition and enrichment centres increasing from about 700 in 2012 to more than 1000 in 2020. This means there are more tuition centres in Singapore than primary schools, secondary schools, junior colleges and universities combined. The growing tuition industry in Singapore is fuelled by the increasing average real incomes of households and the aspirations of parents on their children on keeping up with the competition. Despite changes made by the Ministry of Education to direct students towards enjoying more on the journey of learning by moving away from the emphasis of focusing only on academic grades, the tuition industry has not shown obvious signs of slowing down. In fact, this amount has grown steadily over the years, climbing from six hundred and fifty million Singapore dollars around fifteen years ago and S\$1.1 billion in 2012/13 to S\$1.4 billion in 2017/2018.

Tuition has become the dominant strategy in the education environment. The thinking is if other parents enrol their kids for tuition, it would be best also to do likewise so that their own kids will not lose out. The adopted attitude is cautious, preferring to continue with tuition if only as a form of insurance. In fact, it would still be better to enrol the kids even if other parents are not doing so. This will further ensure that they are ahead. Unfortunately, this results in parents enrolling their children for tuition even when they may already be excelling in school. Parents are spending hundreds of dollars every month, at times close to two thousand dollars, on private tuition. Interestingly, parents are generally aware that extra classes may not actually significantly help push up their children's grades.

As reported in The Straits Times, the national newspaper, by Senior Education Correspondent, Ms Sandra Davie, on 4 July 2015, many children under seven are already attending extra classes every week just to brush up on their English and Maths. This is even before the children are attending formal school. A survey on five hundred parents was conducted by The Straits Times and research company Nexus Link and found that seven in ten enrolled their children in extra classes. For parents with children in primary school, nearly eight in ten parents paid for private tuition. More than six out of ten parents do so for their children in secondary school. More alarmingly, nearly forty per cent of parents surveyed admitted to having their pre-schooling children enrolled in tuition programmes. The top two reasons given for entering tuition programmes were to improve their children's grades and to help them keep up with others. For parents with children in primary school, seventy per cent surveyed said it was to improve grades,

fifty-two per cent was to facilitate their children in keeping up with others. Only a third of the parents responded that the extra tuition actually improved their children's academic performance by "a noticeable extent". Mr Jack Loo, Nexus Link chief methodologist, pointed out that the survey clearly showed that parents sent their children for tuition is largely due to peer pressure and competition while hoping that grades will rise. This results in increased competition and thus fuelling the tuition industry. The survey also revealed that on the average, pre-school children attend two hours of tuition per week, while primary and secondary school students do three hours per week of tuition after school.

Blackbox Research Pte Ltd conducted a survey and published a whitepaper in July 2012, entitled "Private Tuition in Singapore". The survey showed that eighty per cent of Singaporeans really think that tuition helps students to do better in their education. Two-thirds (sixty-seven per cent) of Singaporeans have enrolled their children in tuition programmes at some point in time. Twenty-three per cent have the intention to do so in the near future. Only nine per cent of Singaporeans are averse to having their children in such tuition programmes. Fifty-one per cent of Singaporeans spend more than five hundred Singapore dollars a month per child on tuition fees. 1 in 3 Singaporeans think tuition should start when children are in pre-school. Forty-six per cent of Singaporeans think tuition is necessary simply to stay competitive with peers. Forty-three per cent of Singaporeans think it may be because parents simply want their kids to succeed in their education.

The Singapore society places high emphasis on education. National examinations such as the Singapore-Cambridge General Certificate of Education examinations, both Ordinary and Advanced levels, and the Primary School Leaving Examination certainly add pressure for parents wanting their children to do well. Tutors and classroom teachers also feel the pressure to perform as they prepare their pupils for the examinations. Subsequently, extra tuition classes outside the schools' curriculum are added and this is a common occurrence in Singapore, resulting in the birth of a very lucrative tuition industry in the small island of Singapore as mentioned earlier. Even at primary level where the child is twelve years old, parents see the Primary School Leaving Examination as a consequential exam which will decide the secondary schools and academic streams that their children will be entering.

Interestingly, the Household Expenditure Survey shows that it is the higher-income families that are spending more on tuition. The top 20 per cent of households by household income spend nearly four times as much on tuition as those in the bottom 20 per cent. This is unsurprising as wealthier households are certainly in a better position to pay for tuition classes. However, this is certainly a worrisome situation as it can lead to increasing educational inequality between children from economically disadvantaged and those from advantaged backgrounds.

The current education system in Singapore is obviously working and giving very commendable results. However, here lies the challenge of having students not only just achieving excellence in academic knowledge but also having positive characteristic qualities like being able to think critically and able to work in a team environment effectively. These are qualities which can nurture future entrepreneurs and subsequently, increasing the probability of more entrepreneurs expanding into international markets.

Quite naturally, the fear of failure breeds when placed in a results-oriented environment. As a result, students are results-driven, studying and working hard towards just obtaining the answers or solutions in mind. Clearly, a demonstration of the ends justifying the means. The fear of failure and being stigmatised is certainly an obstacle to entrepreneurship. It inhibits creative thinking and alienates the ambitions of overseas business expansions. Not surprisingly, most students take the safe route of joining the employment market, aided by the strong and increasing Foreign Direct Investments into Singapore. Again, not surprisingly, survey results shown in chapter 4.4.1.1 reflect 38% of the participants were unsure of their interest level of starting an entrepreneurship journey, 20% had simply no interest and 32% were interested if their earnings within 3 years are higher than being employed.

4.5.1.2 Facilitation from Secondary Data: Government incentives and programs to promote entrepreneurship

In chapter 4.2.1, one of the mentioned government incentives and programs to promote entrepreneurship is the Startup Founder SG Programme. This scheme provides a grant of thirty thousand Singapore dollars to first-time entrepreneurs with innovative business ideas. The startups are required to co-match funds of up to ten thousand Singapore dollars to the grant. A mentor will also be provided. Apparently, it does not include entrepreneurs who may have failed

the first time and are starting again for the second or even third time. It also does not cover for an entrepreneur's second company. Also, no subsequent grants will be provided, and this may be one of the limitations of this grant as more finances may be required to scale up the business after the initial startup. As such, this grant could have been made more effective if promising startups were facilitated with additional grants after assessing to have the potential to scale up and more importantly, having a calculated potential of expanding overseas. For sure, second chances must be given to entrepreneurs who have failed in their initial startups. To apply for the grant, the startup must first be formed with a minimum of three Singaporeans and/or permanent residents. Thus, the grant is not open to single sole proprietors or even just two partners.

The Startup SG Tech grant, as mentioned in chapter 4.2.2, provides funding for Singapore companies with approved plans of developing breakthrough technology that can create new markets. Companies can receive up to two hundred and fifty thousand Singapore dollars if the project is shown to be technically and scientifically viable. In addition, if the project is further proven to be commercially viable, companies can receive up to five hundred thousand Singapore dollars. However, the grants will be awarded upon the completion of each agreed milestone. Companies avoided this grant simply due to the need to satisfy each agreed milestone before the agreed amount of grant can be given. Understandably, this money being from the government will require accountability to the government. Entrepreneurs prefer their companies to be autonomous in running and view the need to achieve and report each satisfied milestone as stifling to their momentum. However, the biggest disadvantage of this grant is that the agreed grant amount of each agreed milestone is only given after completion of the milestone. Also, startups are required to put in a paid-up capital of up to 20 per cent of the grant. Aspiring entrepreneurs will consider this mechanism too cumbersome. After all, it was due to lack of financial resources that such grants were sought in the first place.

As mentioned in chapter 4.2.10, the ACE Startups Scheme is for first-time entrepreneurs having an innovative idea to be approved by Enterprise Singapore. It provides mentor support and a starting up capital grant as well as networking contacts. However, this grant will only provide startups up to thirty thousand Singapore dollars by matching \$3 to every \$1 raised by the entrepreneur. It is a commendable grant to kickstart a business idea for a first-time entrepreneur who is expected to further grow his or her business towards achieving sustainability. However, more amounts should be given later to promising startups as 30K is just too little. Through the

Enterprise Financing Scheme, Enterprise Singapore will share the loan default risk of up to 70% with participating financial institutions in the event of enterprise insolvency, as mentioned in chapter 4.2.13. While this scheme has its merits, there are companies still reluctant to it up due to concerns with the accountability of the remaining 30% with participating financial institutions in the event of enterprise insolvency. While the co-sharing of 70-30 is understandable, Enterprise Singapore should consider sharing the loan default risk of up to 100% but of course with only selected companies with qualified criteria.

Not surprisingly, survey results in chapter 4.4.1.6 clearly correlates. Pertaining to the participants' view on whether the financial resources and institutional support provided by the government and private sectors are sufficient for business startups, only 10% felt that they were at least mostly sufficient. 46% of the participants responded as absolutely insufficient while 34% responded mostly insufficient. As such, survey results in chapter 4.4.1.4 become comprehensible where 14% of the participants were not confident of their financial resources and 72% of the participants responding simply having insufficient financial resources in starting a business. This then leads to an increased fear of failure which is clearly shown in chapter 4.4.1.7 with 70% of the participants agreeing that the fear of failure can be a reason preventing individuals from entering full-time entrepreneurship. Unfortunately, the social stigma of being labelled a failure is still evident in the Singapore society. Thus, this fear of failure results as an obstacle for entry into entrepreneurship journey. This triggers a chain reaction with chapter 4.4.1.1 showing 38% of the surveyed participants being unsure of their interest level of starting an entrepreneurship journey, 20% had simply no interest and 32% were interested if their earnings within 3 years are higher than being employed. Financial concerns were apparent here for those who were interested and made more challenging with the given timeline to themselves. Comes with no surprise then that 74% of the surveyed participants were of the view that the culture of entrepreneurship is not evident or present, as shown in chapter 4.4.1.2. Only 16% were of the opinion that there is still a culture of entrepreneurship. Note that out of this 16%, only 7% gave a 'strong yes' while the response of the remaining 9% was 'somewhat yes'.

4.5.2 Correlation of Literature Review to Survey 2 Findings

In chapter 4.4.2.2, 42% of the participants have not done any market study on their targeted international markets. 38% considered themselves as having done some research but admitted to not being focused and detailed in their research yet. These participants have no intention to explore or enter any international market but only to stay in the local domestic market at the point of the survey. A few reasons emerged and these include financial limitations for overseas expansion, familiarity level of the overseas operations, feeling sufficient to just stay in the local domestic market as they already have their hands full. Khalique et al. (2011) confirmed that areas found wanting in the capabilities of SMEs are knowledge in marketing techniques, know-how in branding both locally and internationally, access to viable credit and good contacts or networks with local and international enterprises. All these also act as inertias to be overcome before executing any market study activities. Khalique et al. (2011) reiterated that it is indispensable for high-tech enterprises to pay full focus to their product innovations, marketing channels as well as market developments and services. Karadaq (2015) further adds that with inadequate information on foreign market opportunities as well as lack of financing and technical knowledge, the competitiveness of products and services is lowered significantly. Toulova et al. (2015) recognised the biggest barriers to internationalization are the inadequacy of language skills of employees, insufficient experience dealing with foreign markets, the high costs of marketing activities in foreign markets and the weak public support or subsidies. Toulova et al. (2015) concluded that success of an enterprise depends on its degree of previous experience with foreign trade and whether it has been diligent in searching for information about foreign markets before entry. Leveraging from Toulova et al. (2015), Singapore SMEs face similar challenges when considering internationalisation of their sales and operations.

This is further reiterated by the survey results shown in chapter 4.4.2.4 which shows that 38% of the participants considered themselves as not having the necessary skills and knowledge to enter an international market. 54% claimed to have some having some level of skills and knowledge but admitted to not fully enough to actually make the move outside their comfort zone. Only 8% replied positively to this survey question and this is just too small a percentage which is concerning. It is vital that SMEs equip themselves with adequate skills and know-how before embarking into any international market so that they can have the optimal chances of sustainability and success when overseas. As such, SMEs quite naturally turn towards only the domestic market. According to Jenifer et al. (2015), cultural barriers need to be managed to

foster an affective organisational climate. Inadequate cultural information leads to irrational choices during cross-cultural communication. This often leads to cultural stereotyping which can exaggerate or over-generalise what we perceive about people, leading to increased anxiety. Jenifer et al. (2015) recommends that employees should be given basic cross-cultural training as well as sufficient language training at least for business communication.

Referencing from the survey results in chapter 4.4.2.4, it becomes even more challenging when Beier et al. (2016) reiterated that a certain level of legitimacy and reputation can essentially facilitate a successful entry into a new foreign market. Thus, SMEs wanting to enter foreign markets must build relationships with the national stakeholders of the targeted foreign markets and earn their confidence. However, this becomes more challenging for lesser known SMEs with limited resources. In addition, such firms are at a higher risk of not succeeding because of their unawareness of cultural differences and the accompanying economic and political regulations. Beier et al. (2016) argued that strong and diverse networks are essential for SMEs to enter into and develop foreign markets successfully. SMEs may accelerate their internationalisation efforts by having partners from the target country or with partners from their home country but with the necessary expertise of the target foreign markets. Beier et al. (2016) raised the awareness that the support for the internationalisation process that partners from the home country can provide usually differs from the support that partners in the target country can provide. Relationships built with local partners of the target country, besides providing direct access to market knowledge and contacts, can also give foreign SMEs a certain amount of legitimacy. However, having relationships with internationally experienced partners of home country or domestic partners can positively influence the international intensity by providing experiences learned on the challenges of entering the targeted foreign market.

Reinforcing the urgency required as reflected in the survey results of chapters 4.4.2.2 and 4.4.2.4, Cao et al. (2011) proposed strategic networking as a tool for Chinese SMEs to engage the global markets through collaboration with other firms. This helps the Chinese SMEs to overcome the challenges of language and cultural constraints. More importantly, his or her capacity to interpret other cultures is significantly diminished and thus increases the challenges of entering foreign markets. Strategic networking accelerates the process of accessing foreign customers and other resources, thus improving the competitive advantages of an SME through knowledge sharing and business cooperation. There is certainly the urgency to conduct market

research and having the necessary skills and knowledge to enter a foreign market for Singapore SMEs.

Hsu et al. (2013) emphasises the importance of a CEO having sufficient international experience. Having the experience of working and living in a different country has a significant influence and impact on a manager's cognitive orientation. The manager's pace of integrating into a different culture is quickened and his or her confidence is increased when dealing with uncertainties of complex international operations within foreign environments. Such knowledge of foreign markets is vital to overcoming the psychic distance involved when doing business in foreign markets. Consequently, with a global mindset, managers are able to reconcile or extinguish any tensions between the local and global employees. Hsu et al. (2013) reiterated that with international experience, CEOs are better equipped to manage international operations, reducing the integration and coordination cost, thereby increasing the internationalisation performance. Leveraging from Hsu et al. (2013), as challenging as it may be, the nurturing and development process of global leaders for Singapore SMEs to succeed in the highly competitive global market is of utmost importance. This is further reiterated by the survey results shown in chapter 4.4.2.4 which shows that 38% of the participants considered themselves as not having the necessary skills and knowledge to enter an international market. 54% claimed to have some having some level of skills and knowledge but admitted to not fully enough to actually make the move outside their comfort zone.

As shown in chapter 4.4.2.3, only 12% of the participants considered themselves to have sufficient financial resources for overseas expansion. 23% were unsure if they have adequate financial resources as they have not even started exploring the possibility of overseas expansion. It was concerning to know that 65% of the participants considered themselves to have insufficient financial resources to even consider expanding overseas. Karadaq (2015) pinpointed that despite having certain advantages over large-sized competitors, SMEs still possess weaknesses and challenges of their own. Having poor control of financial matters is one key reason for business failures among SMEs. Among various problems of the SMEs, most have a financial nature. Especially when the owners of the SMEs are from a technical background, their knowledge about finance and accounting usually is limited. This affects business sustainability as well as subsequent expansion. More so for Singapore with its high

cost of labour as well as the complexity and cost of bureaucratic transactions when launching of a new business.

Cao et al. (2011) writes that most Chinese SMEs face limitation in their growth roadmap due to their financial constraints. Thus, in 2010, China announced policies with the deliberate attempt of facilitating SME growth by announcing a preferential tax policy as well as establishing convenient channels for fund raising and removing institutional barriers. Similarly, access to channels for fund raising has to be made easier and accessible for Singapore SMEs. In the survey results of chapter of 4.4.2.3, it was concerning to know that 65% of the participants considered themselves to have insufficient financial resources to even consider expanding overseas.

In chapter 4.4.2.1, it is shown that only 20% of the participants responded to being familiar with the legal and regulatory requirements of running an overseas business. 25% were completely not familiar while half of the participants were somewhat familiar but admitted that they should be finding out more. Being familiar with the legal and regulatory requirements of a foreign country is certainly a pre-requisite before entering its market. This becomes more challenging as we move further into the 21st century where there is increasing demand for environmentally friendly products and services. Karadaq (2015) writes that environmental legislation is not straight forward and the costs involved to comply with the legislation can be a challenge. Furthermore, as reported by Hameed et al. (2019), experienced entrepreneurs are not sharing enough of both their success and failure historical stories with potential new entrepreneurs. As Tan (2014) stated, regulations implemented in the Singapore business environment are focused on enforcement and compliance. As such, Singapore SMEs naturally develop a certain level of dissatisfaction with the government due to their perception of over-regulation and as such discontent over the regulations and their implementation.

Political and institutional constraints can unknowingly work as economic barriers for SME when planning to expand overseas. Rules are developed by governments for day-to-day living and this is through a political and legal framework. However, this also influences the business environment (Rahman et al., 2017), especially with the government determining the fiscal and monetary policies that will influence the way of doing business. Obviously, political instability increases the business cost and competitive disadvantages for both local and international firms.

Not surprisingly, some investors may be less motivated to invest in such regions. Rahman et al. (2017) reiterated the importance of political stability as it affects the business environment and the way business is conducted. On the other hand, government policies can be adjusted to quicken the internationalisation of firms. For example, removing international trade barricades and embargoes, setting up export processing zones (EPZ) where the firms can produce and trade under favourable conditions. Therefore, before deciding to enter the international markets, the individual should first understand the nature of the political and legal environment of the target countries. This is certainly a valued advice from Rahman et al. (2017) for all Singapore SMEs wanting to expand overseas and certainly a challenge for Singapore SMEs as survey results in chapter 4.4.2.1 shows that only 20% of the participants responded to being familiar with the legal and regulatory requirements of running an overseas business.

Abusing of public power for private or personal gain is corruption. Common forms of corruption include bribery, embezzlement, extortion, nepotism, cronyism, fraud, misappropriation of public assets, among others. Corruption can occur at any time, at any level and in any sector. Corruption not only raises the cost of doing business but discourages both domestic and foreign investments. For SMEs, corruption is a major concern and considered as a significant barrier of entry into a foreign market (Rahman et al., 2017). With a top-down approach by the Singapore government in policy making, Singapore SMEs will certainly find challenges in internationalisation when corruption is a 'norm' in a particular foreign market, perhaps more so when dwelling among the neighbouring Southeast Asian countries. Understandably, Rahman et al. (2017) was generic when discussing the topic of corruption. This is a challenge for Singapore SMEs as survey results in chapter 4.4.2.1 show that only 20% of the participants responded to being familiar with the legal and regulatory requirements of running an overseas business. Chapter 4.4.2.4 reflected that survey results show 38% of the participants considered themselves as not having the necessary skills and knowledge to enter an international market while 54% claimed to have some having some level of skills and knowledge but admitted to not fully enough to actually make the move outside their comfort zone. Finally, survey results in chapter 4.4.2.2 show 42% of the participants as having not done any market study on their targeted international markets while 38% considered themselves as having done some research but admitted to not being focused and detailed in their research yet.

Survey results shown in chapter 4.4.2.5 support the need to revisit the current government programs facilitating SMEs in their international business expansion. 92% of the participants were actually aware of the availability of such programs. However, out of these 92% of participants, 45% have applied but were never successful in their applications and 47% have never applied though they were aware of the availability of such programs. It is not surprising that 45% of the participants who applied were not successful in obtaining the stated grants. The secondary data in chapter 4.2 demonstrated that there are conditions and criteria to be satisfied before the grants can be given out. SMEs, especially the smaller sized SMEs, will find it a challenge to meet these conditions and criteria. Of the 47% who have never applied but were aware of the programs, the reasons given were that they felt they would not be granted after understanding the conditions and criteria as well as not wanting to be subjected to the regular audit on their progress. Furthermore, survey results in chapter 4.4.2.6 show that only 8% of the participants expressed that the government programs supporting SMEs in their overseas expansion are adequate. An alarming 70% simply put it down as insufficient. 22% of the participants felt they were somewhat sufficient but haven't given much thought and research into them. Clearly there is a need to revisit and modify the current available government programs, thereby facilitating SMEs in their successful international business expansion. In addition, there are not many government assistance schemes directly addressing the needs of start-ups. Obviously bureaucratic in their approach, policy makers also have to overcome the challenge of government agencies being viewed as bureaucratic. Entrepreneurship development agencies should not be only emphasising only on growing firms with potential as this may result in SMEs having the notion that the government is only picking firms with winning potential. As such, they may not feel encouraged or motivated to utilise the infrastructure (Tan, 2014).

Spring Singapore was spot on when deriving the five main barriers to internationalisation faced by Singapore SMEs. Among these 5 main barriers, 2 were limited financial resources and limited access to capital. This is reiterated in our survey results as shown in chapter 4.4.2.3. Another 2 barriers identified by Spring Singapore are limited knowledge of overseas market opportunities and limited government assistance. This is again reiterated in our survey results as shown in chapters 4.4.2.4 and 4.4.2.6 respectively. Spring Singapore then further do a survey among SMEs to find out their awareness of current government internationalisation initiatives for SMEs. Key government programmes were listed for each economy and participants had to indicate if they were aware of them. The results were tabulated as secondary data, shown in

figure 1 under chapter 2.5. It was found that awareness is generally stronger in Hong Kong, China, Malaysia and Peru. Only 29% of the SMEs surveyed in Singapore were aware of the available international initiatives (Spring Singapore: Study on SME Internationalisation Best Practices Across Selected Asia-Pacific Economic Cooperation Economies, 2011).

4.5.2.1 Facilitation from Secondary Data regards to SMEs entering international markets

Dr Tan Wee Liang, Associate Professor of Strategic Management at Singapore Management University's Lee Kong Chian School of Business, has mentioned that many SMEs simply are just not ready to go into international markets. Especially for local family-owned companies, they are already fully occupied with the local business issues and challenges. As a result, even finding it difficult to find time to think about overseas expansion. At the same time, these SMEs are always fighting against the lack of manpower and financing. Understandably, there is always a constant preoccupation with trying to survive, addressing only immediate local concerns. As a result, developing a perception of not having the capacity to go overseas or simply just not having the required excess capacity to do so.

As reported in The Straits Times, the national newspaper, on 29 January 2018, a survey done by QBE Insurance on more than 400 firms found that only fourteen per cent of SMEs intend to expand overseas. Nearly half have indicated no intention of venturing outside Singapore and 42 per cent of them stated insufficient funds as the reason. Survey results from Chapter 4.4.2.3 clearly reiterate the findings of this survey done by QBE Insurance as it shows only 12% of the participants considered themselves to have sufficient financial resources for overseas expansion. 23% were unsure if they have adequate financial resources as they have not even started exploring the possibility of overseas expansion. Very concerning to know that 65% of the participants considered themselves to have insufficient financial resources to even consider expanding overseas.

QBE Insurance also reported in their survey that they found 38 per cent of the participants citing being not familiar with the standards and processes of foreign markets. Survey results from chapter 4.4.2.4 also show that 38% of the participants considered themselves as not having the necessary skills and knowledge to enter an international market. 54% claimed to

have some having some level of skills and knowledge but admitted to not fully enough to actually make the move outside their comfort zone. Obviously, they all stayed only within the local domestic market. It is vital that SMEs equip themselves with adequate skills and know-how before embarking into any international market so that they can have the optimal chances of sustainability and success when overseas. From this survey, we can see there is no definitive attempt to find out more with regards to entering an overseas market. As such, this leads to no definitive intention to break out of the domestic market.

Other prominent concerns as reported by QBE Insurance include the competition level to be facing in foreign markets as well as the need to comply with regulatory and compliance laws. Another reason kept being mentioned was the political stability or instability of a targeted foreign country. As shown in the findings of the survey done as shown in chapter 4.4.2.1, only 20% of the participants could comfortably say yes to being familiar with the legal and regulatory requirements of a foreign country, 25% were completely not familiar while half of the participants were somewhat familiar but admitted that they should be finding out more. Perhaps this is one of the reasons why they have yet to enter the international markets and are only transacting within the local Singapore market. Also in chapter 4.4.2.2, the survey done indicates 42% of the participants as not having done any market study on their targeted international markets. 38% considered themselves as having done some research but admitted to not being focused and detailed in their research yet. Only 20% of the participants considered themselves as having done the necessary research but have yet to enter any overseas market. For the 80% who have not done their research or some research but nothing concrete yet, there was no intention of exploring or entering any international market but only to stay in the local domestic market at the point of the survey. A few reasons emerged and these include financial limitations for overseas expansion, familiarity level of the overseas operations, feeling sufficient to just stay in the local domestic market as they already have their hands full. Survey results of both chapters 4.4.2.1 and 4.4.2.2 clearly run parallel with the findings of QBE Insurance.

Dr Tan Wee Liang, Associate Professor of Strategic Management at Singapore Management University's Lee Kong Chian School of Business, also noted that while there are relevant government support schemes available, there seems to be a general reluctance on the part of the SMEs to take up such schemes. These are schemes whereby the local

banks provide loans to SMEs for their overseas expansion, provide the link to help companies build their overseas networks and even provide the necessary funds for the Singapore SMEs to collaborate with overseas companies although with certain conditions to be met. There are also schemes that provide funding for the SMEs to engage third party consulting companies in areas such as international brand building and gathering of market intelligence on the targeted overseas market.

Mr Ho Meng Kit, the former Chief Executive Officer of the Singapore Business Federation (SBF), mentioned in Channel News Asia Commentary on 16 March 2020 that although there are several government-initiated programs supporting Singapore firms to go overseas, many are still reluctant and seemingly remain consistent with their focus on the domestic market. Apparently, this reluctance is more evident with the latest trends of the digital economy, better technology, and improved transportation links. Survey results as shown in chapter 4.4.2.6 certainly provide reason for this reluctance. Only 8% of the participants expressed that the government programs supporting SMEs in their overseas expansion are adequate. An alarming 70% simply put it down as insufficient. 22% of the participants felt they were somewhat sufficient but haven't given much thought and research into them. With 70% of the participants finding the current government programs insufficient, clearly there is a need to revisit and modify the current available government programs, thereby facilitating SMEs in their successful international business expansion. It is no wonder that for those SMEs not wanting to leave the relatively comfortable and certain home market, going abroad is probably too much of a jump in the deep. Not enough of the SMEs in Singapore are willing to leave their comfort zone and expand their presence into international markets. The tendency is to continue being domestically focused.

In chapter 4.4.2.5, a survey was done to assess if participants were actually aware of the availability of government programs supporting international business. 92% of the participants were actually aware of the availability of such programs. However, out of these 92% of participants, 45% have applied but were never successful in their applications and 47% have never applied though they were aware of the availability of such programs. Only 8% were not aware of the availability of such programs. It is not surprising that 45% of the participants who applied were not successful in obtaining the stated grants. As shown in Chapter 4.2, there are conditions and criteria to be satisfied before the grants can be given out. SMEs, especially the

smaller sized SMEs, will find it a challenge to meet these conditions and criteria. Of the 47% who have never applied but were aware of the programs, reasons given were that they felt they would not be granted after understanding the conditions and criteria as well as not wanting to be subjected to the regular audit on their progress. It is therefore not surprising that there is evidently a reluctance among SMES in taking up government-initiated programs supporting overseas expansion and seemingly remain consistent with their focus on the domestic market.

4.5.2.2 Facilitation from Secondary Data: Government incentives and programs to support SMEs in their overseas expansion.

In chapter 4.2.6, one of the mentioned government incentives and programs to support SMEs in their overseas expansion is the Market Readiness Assistance Grant which facilitates the processes of market set-up, business development and market promotion. With this grant, SMEs will get a one-time grant up to seventy percent of the eligible costs, capped at one hundred thousand Singapore dollars per company per new foreign market. However, it takes more than just financial assistance only to facilitate a SME's successful expansion into an overseas market. The value of this grant can be further enhanced by providing mentorship. An entrepreneur who has already successfully expanded his or her business overseas can act as a mentor providing invaluable experience. The grant is managed by Enterprise Singapore, a statutory board under the Ministry of Trade and Industry of the Government of Singapore. Obviously, this amount may be somewhat insufficient for promising SMEs with ambitious overseas expansion plan. As a result, such SMEs will have to spend time sourcing for additional funds, unlikely from the government again but from the private sector. This can be a discouraging factor when SMEs are considering to take up the grant. In addition, the Enterprise Development Grant as mentioned in chapter 4.2.8 aims to help Singapore companies in their growth by helping them to upgrade their business as well as facilitate their innovation and encouraging them to venture overseas. However, these SMEs will need to be initially assessed to be in a financially feasible position to complete the project. As such, young and upcoming SMEs or promising start-ups don't really stand a chance to qualify for this grant. The grant funds qualifying project costs which are namely, third party consultancy fees, purchase of software and equipment, manpower cost, improvement of sustainability performance, redesigning of workflow and processes, adaptation and conversion to automation and technologies. Unfortunately, this grant does not fund the marketing or business

development costs as well as the providence of a mentor to offer experience in the area of business overseas expansion. For the Enterprise Financing Scheme, as shown in chapter 4.2.13, Enterprise Singapore will be sharing the loan default risk of up to 70% with participating financial institutions in the event of enterprise insolvency. While this scheme has its merits, there are companies still reluctant to take it up due to concerns with the accountability of the remaining 30% in the event of enterprise insolvency. While the co-sharing of 70-30 is understandable, Enterprise Singapore should consider sharing the loan default risk of up to 100% but of course with only selected companies with qualified criteria, thereby lessening their worries of being accountable to the financial institution in the event of insolvency.

It is therefore not surprising that from the results of our survey done as shown in chapter 4.4.2.6, only 8% of the participants expressed that the government programs supporting SMEs in their overseas expansion are adequate. It is not surprising that 70% of the participants find the current government programs insufficient. Clearly there is a need to revisit and modify the current available government programs, thereby facilitating SMEs in their successful international business expansion. Again, it is not surprising that only 12% of the participants considered themselves to have sufficient financial resources for overseas expansion in accordance to the survey results shown in chapter 4.4.2.3. 23% were unsure if they have adequate financial resources as they have not even started exploring the possibility of overseas expansion. It was concerning to know through this survey that 65% of the participants considered themselves to have insufficient financial resources to even consider expanding overseas.

In chapter 4.4.2.5, a survey question was asked to investigate and find out the level of awareness among SMES on the availability of government programs supporting international business expansion. Interestingly, 92% of the participants were actually aware of the availability of such programs. However, out of these 92% of participants, 45% have applied but were never successful in their applications and 47% have never applied though they were aware of the availability of such programs. Only 8% were not aware of the availability of such programs. It is not surprising that 45% of the participants who applied were not successful in obtaining the stated grants. As shown in Chapter 4.2, there are conditions and criteria to be satisfied before the grants can be given out. SMEs, especially the smaller sized SMEs, will find it a challenge to meet these conditions and criteria. Of the 47% who have never applied but were aware of the

programs, reasons given were that they felt they would not be granted after understanding the conditions and criteria as well as not wanting to be subjected to the regular audit on their progress. In support of this survey result, we look at chapter 4.2.3 which describes the Startup SG Equity scheme, a government program supporting SMEs in their overseas expansion. This scheme was set up to attract more investments into deep-tech startups dwelling in emerging sectors and based in Singapore. The involved sectors include advanced manufacturing, pharmaceutical industry, biotechnology, medical technology and agri-food technology. This scheme involves the government co-investing with selected venture capitalists that will in turn also invest in these deep-tech startups. The government had pledged three hundred million Singapore dollars to Startup Equity at the Ministry of Trade and Industry's Committee-of-Supply 2020 with an investment cap for deep-tech startups at S\$8 million. While this is certainly impressive, it is obviously only for selected or targeted SMEs. Obviously, most SMEs will not benefit or are even eligible to apply. Successful applicants to this grant must have already identified independent third-party investor(s) as well as possessing the recognised potential for high growth with clear scalability for expansion into targeted international markets. Most SMEs are already facing challenges when attempting to enter their first international market, so this grant is certainly not a fit for them. As mentioned earlier, the government will be co-investing with venture capital firms and this raises the possibility of such companies being absorbed in the future into a GLC company which becomes a competitor to the other emerging SMEs. Another supporting example is the Enterprise Development Grant (Co-Innovation Programme), mentioned in chapter 4.2.9. It is awarded to projects that have responded to the call-for-proposals from the strategic partnerships of Enterprise Singapore with France, Germany, Israel, Jiangsu, Korea, Shanghai, the United Kingdom, Zhejiang, Eureka Network. This programme is a good fit for SMEs looking to collaborate on Research and Development (R&D) projects that can produce new products or solutions with strong market potential. Concurrently, SMEs can gather support on projects that encourage overseas collaboration on technology and innovation. This certainly facilitates internationalisation. If awarded, eligible companies can receive up to seventy percent in fund support when collaborating with their foreign, in-market partners. Certainly, a grant of value but only to SMEs with Research and Development (R&D) capabilities as well as being assessed as financially viable to complete the project.

Perhaps one commendable government incentive is The Double Tax Deduction for Internationalisation initiative, as shown in chapter 4.2.12. This incentive encourages Singapore

businesses to move forward with their plans to foray into the overseas markets. This initiative is already effective on the Year of Assessment 2019 and Singapore businesses carrying out approved overseas business activities are entitled to a two hundred percent tax deduction up to one hundred and fifty thousand Singapore dollars on expenses incurred for these activities. However, a SME obviously needs more than just tax break incentives to expand overseas successfully.

4.6 Summary

In this chapter, key secondary and primary data were presented, facilitating in our discussions as well as recommendations in the next chapters. A detailed mining of data pertaining to the available government incentives and programs promoting entrepreneurship was comprehensively done and comprehended. Certainly, more facilitations from the government are required here and it should not be just the providence of financial support. The survey results clearly show a need to revisit these current government incentives and programs.

Singapore's education system was also looked into, exposing a system which is predominantly academic and results-oriented on the mathematics, sciences and humanities in the primary and secondary levels of education. This is one area for further discussions and recommendations will be provided as entrepreneurship or at least the awareness of entrepreneurship should begin early.

Primary data was painstakingly obtained through two surveys. The first survey was conducted with non-entrepreneurs, age 21 to 35. This constitutes undergraduate students, postgraduate students and employees of companies and organisations. This survey was crucial to further understand the concerns of non-entrepreneurs when exploring the possibility of entrepreneurship as well as the constraints faced. The second survey was conducted with entrepreneurs or business owners of SMEs who have yet to enter the international markets and are only transacting within the local Singapore market. Aim of this survey was to comprehend the concerns and constraints faced by entrepreneurs and subsequently preventing expansion to markets outside Singapore. The surveys were conducted using semi-structured in-depth questionnaires with open-ended questions. Where required and with permission from the participants, one-on-one interviews were conducted to further understand the answers provided

to the questions that require further clarification. Certainly, one key plus point of conducting surveys using semi-structured in-depth questionnaires with open-ended questions is the opportunity to examine the detailed experiences of the researched participants.

Finally, a triangulation was done using results obtained from the semi-structured exploratory survey questions and interviews, documents from the literature review and mined secondary data. Executing triangulation in any research study is a must as the process increases the credibility and validity of findings and this further enriches the research study. The triangulation strategy of using multiple approaches encourages many methods for collecting data and facilitates validation of the data collected through cross verification from more than 2 sources and thereby verifies the consistency of findings.

In the next chapter, supporting recommendations will be provided with correlation to the primary and secondary data obtained. This validates the research as the study gradually goes into a satisfying conclusion.

CHAPTER V: RESEARCH RECOMMENDATIONS AND CONCLUSION

5.1 The Necessity of Creating a Good Entrepreneurial Environment in Singapore

The government should be looking at how to create a good entrepreneurship ecosystem. In other words, what are the vital or even crucial inputs needed to create an entrepreneurial environment in Singapore and these must be conducive for start-ups as well as nurturing for entrepreneurs to thrive and grow, leading to a sustainable overseas expansion.

If we keep having the consistent thinking that entrepreneurship is inborn, then there is not much we can do. We will just continue to make Singapore an attractive place to live in, and subsequently attract the people whom we believe can become great entrepreneurs to live in Singapore. One such famous person is of course Eduardo Saverin, co-founder of Facebook, who emigrated to Singapore in 2009 and renounced his USA citizenship in 2011. James Dyson, founder of Dyson Limited, once resided in Singapore before moving back to the United Kingdom in April 2021. However, Singapore must also be not losing its own domestic potential entrepreneurs to other more attractive countries through emigration. Thus, if we continue to believe that entrepreneurship is inborn, there is really very little we can do to influence entrepreneurship to the extent of becoming ingrained in people of Singapore.

On the other hand, if we believe that entrepreneurship can be taught and nurtured, then government and society can help to develop the spirit of enterprise and train the entrepreneurial mind. This includes rapidly understanding and acknowledging the smallness of the Singapore market and therefore the need to expand into international markets for sustainability and growth. Such an approach undoubtedly creates greater chances for entrepreneurs to blossom and increases the likelihood for entrepreneurship to succeed in less entrepreneurial economies. Thus, this leads to the question of what is required to teach and train the mind so as to increase

the chances for entrepreneurs to succeed. We must therefore create the right environmental conditions which will facilitate the development of a more entrepreneurial society.

Firstly, it is advantageous to understand the challenges Singapore face in creating an entrepreneurial society and economy. The economic development model of Singapore in the past did not greatly support entrepreneurship development. It was certainly excellent in attracting foreign direct investment of established companies and the government also took a direct role in owning and running companies through establishing Government Linked Companies (GLCs). This created a challenging environment for the success of home-grown companies.

The development of Singapore society over the last 30 years shows that the thinking of many senior political leaders is in the concept of discovering "a few good men". Meaning, the belief is that leaders (and hence entrepreneurs) are born with the necessary skills, and therefore, these people simply remain to be discovered. However, the discovery approach is a rather simple method of assessing the academic abilities of people. Thus, the thinking is, if they are academically smart, then they are most likely natural leaders. Not surprisingly, what was seen was that more opportunities were given to people with academic skills. Hence in a structured system, they will have a greater chance of success with their paths smoothed for them. This is what we call a scholar system which the Singapore system strongly endorses. It is quite typical of an oriental way of life.

It is therefore understandable why many CEOs of Government Linked Companies (GLCs) in Singapore are former senior military officers or senior government officers, all of whom were academic scholars. Thus, the belief is the same where one measure is good enough to discover

the potential. Namely, the belief of the academic excellence model of grades, which once you have, will let you be a good leader, entrepreneur or CEO. This thinking that an academic scholar can be a good entrepreneur is a fallacy.

Entrepreneurship knowledge and skills can be taught, nurtured and developed further. Unfortunately, entrepreneurial talent is often left undiscovered unless the environment is conducive enough to facilitate the unleashing of that potential. Obviously, given more knowledge and with greater exposure, this helps in the development of an entrepreneurial mindset right from his or her school days. It is recommended that entrepreneurship be taught as a compulsory subject in school. So urgent is the matter at hand that entrepreneurship should not be an elective or optional subject but only compulsory. The Ministry of Education (MOE) should look into drawing out a curriculum, perhaps starting from upper primary level which is equivalent to an eleven-year-old student, up to junior college level which is equivalent to an eighteen-year-old student. Whether it becomes a non-examination or examinable subject, MOE can surely work the details out. Perhaps for a start, it may be a non-examination subject. Most importantly, there is an established system where entrepreneurship is communicated and taught to young minds. Understandably, not all will eventually become entrepreneurs or successful entrepreneurs but at least there is an awareness among the young minds. This increases the pool of potential entrepreneurs and enhances the probability of producing more entrepreneurs who will eventually expand into the overseas markets outside Singapore.

For polytechnic students and university undergraduates in non-business courses, entrepreneurship by itself should be a compulsory examinable subject, understandably not a major subject but a compulsory elective to be taught every year throughout the three- or four-years' course. The weightage of this elective to an individual's diploma or degree can of course

be adjusted according to the course of his or her study. It is without doubt that the benefits to an engineering student also studying entrepreneurship as a subject are certainly undeniable. Even a medical student can benefit from the study of entrepreneurship as it may be of help in the future when considering to go into doctoral private practice with the opening of his or her own clinic or even a hospital. If successful and with Singapore already a small saturated market, opening of medical centres overseas is certainly the next natural move. The same applies also to law undergraduates with the consideration of opening a law firm or firms in the future.

As such, the entrepreneurial environment in Singapore is so challenging and harsh that only the diehard entrepreneurs were discovered, but many remain undiscovered. On the other hand, people living in more entrepreneurial economies are more readily drawn to entrepreneurship because the environment pulls them towards entrepreneurship more easily. When does an individual decide to become an entrepreneur? Some will reply that they started very young, experimenting with things at an early age. Some did entrepreneurial things at their workplaces as it was a natural thing to do and yet others will say they only really started after they retired from their careers. These answers again give hope that entrepreneurs are not just born but can actually be nurtured and discovered depending on the environment. The common theme for all is that entrepreneurship is a mindset. And if one can develop that mindset, then one can become an entrepreneur.

Thus, for a start, there must be a belief that entrepreneurship can be taught, developed and nurtured. This applies particularly for societies, in particular Singapore, that have been used to the academic scholar system or to a system that was driven predominantly by large multinational corporations or large GLCs. Without doubt, a mindset change is necessary here. The most important change in mindset at both the government and societal level is the utmost

belief that entrepreneurship can be taught, nurtured and developed, while the government and society must play a part in facilitating the process. As mentioned earlier, it is recommended that entrepreneurship be taught as a compulsory subject in school. So urgent is the matter at hand that entrepreneurship should not be an elective or optional subject but only compulsory.

It is without doubt that the government must be involved in the process of developing entrepreneurship in Singapore. Unfortunately, the government is already involved in so many businesses, social, and political areas to the extent that it becomes difficult for an individual to break into entrepreneurship successfully unless the government does something about it. Also, the people of Singapore are already so used to the government leading the way, looking towards the government to change the direction first before taking the initiative. For example, success in Singapore has always been narrowly defined as achieving academic excellence, obtaining a government scholarship, getting a good administrative services job with the government, landing a high-paying job in a very large multinational company or large GLC. This has been ingrained to a whole generation since their school days and as such, it is not easy to change their way of thinking. The only way out is having the government play a leading role in getting things started and enticing Singaporeans out of their inertia. More importantly, once momentum is achieved, the government must slowly step back until the whole entrepreneurship momentum achieves sustainability and is driven by the private sector. The government can of course continue to play the role of the facilitator while continually building and improving the environment as the entrepreneurial landscape evolves. The government has to also quickly recognise that it is counterproductive by being directly involved in shaping the landscape and that the private sector is able to actually sustain the momentum by itself. On the contrary, if the government still continue to feel it should be the biggest player, even with the government incentives and programs to promote entrepreneurship as spelled out in Chapter 4.2, then the

hopeful emergence of an entrepreneurial economy will continue to be diminishing. The same will happen if policies and regulations implemented by the government are suited more for the bigger GLCs and multinational companies.

In Singapore, there are many GLCs that are funded and supported by the government. They typically compete with start-ups for contracts, especially government contracts. This includes competing for overseas contracts too. In fact, the Singapore market is limited and already so saturated that even the GLCs are seeking overseas opportunities to support their revenue growth. This is actually understandable especially when they are public-listed and needing to answer to investors. Obviously, this narrows opportunities for start-ups or even matured SMEs for overseas markets. The problem is that currently, the GLCs are in so many businesses, it's impossible to compete and they rarely work with smaller companies. So, the best possible way for start-ups and SMEs to succeed locally is to look at areas which GLCs do not yet occupy or are too big to pivot.

For a start, we recommend that certain sized government procurement contracts be reserved for SMEs only. This of course must be drawn out as a government policy and instilled. This practice is not new. In the United States of America, the Office of Government Contracting of the US Small Business Administration strategically implements policies just to make sure that certain government procurement is directed only to small businesses. Under their Small Business Act, federal agencies proceed with procurements that have been reserved solely for small business participation. This is of course ascertained at certain predetermined financial levels of the procurements involved. For example, for procurements expected to exceed a certain threshold value, prime contractors (government agencies) are required by law to make and show the “best effort” effort to make use of small businesses as subcontractors. In fact, where procurement

exceeds a larger threshold, the prime contractor (government agency) is required to submit a formal plan that establishes the small businesses' subcontracting goals and tells how the small businesses will be made use in each subcontract category as well as the pertaining timely payments.

In this chapter, the importance of the government making the first step in the whole entrepreneurship journey is crucially vital. However, the entrepreneur also must understand that this does not mean the government will carry the entire journey and ends with the government. In the long run, when steady state is reached, dependence on the government will not be needed. Neither can the government do much once the momentum is in place.

5.2 Requirements for brewing a Successful Entrepreneurial Environment

What can be done to promote entrepreneurship development in any country or society? What are the facilitations or ingredients that can help a country like Singapore succeed in this new direction of creating and building an entrepreneurial economy? What must be done to achieve a good ecosystem for entrepreneurship? Finally, what does it take for Singapore SMEs to break into the international markets thereby achieving further sustainable growth?

From the survey results as well as the secondary data obtained, the following 6 contributing ingredients or facilitations are required and therefore recommended here.

1. The Regulatory Environment
2. The Financial Environment
3. Human Resource – The Entrepreneurs
4. Government Initiatives and Infrastructure

5. Collaboration between Institutes of Higher Learning and Small Medium Enterprises

6. Innovation and Enterprise (I&E) Activities

5.2.1 The Regulatory Environment

A country's regulatory environment influences the way society treats entrepreneurs, how their failures are subsequently perceived as well as how the government influences the economic landscape. As such, a country's regulatory environment can aid or hinder the fostering of an entrepreneurial environment. In short, we need a conducive regulatory environment.

The government should be continually reviewing the rules and regulations, particularly those that may hinder businesses. All public sector agencies should review their rules regularly, for example, on a five-year cycle. This is very useful as it refreshes all rules and regulations, making them consistent and in sync with the prevailing environment. Legislation with sunset clauses could also be very useful but the civil servants must be arduous in justifying the extension on the law and to get the law re-approved. Unfortunately, this contrasts with the existing system of keeping intact the potentially outdated laws or clauses of legislation even if they no longer make sense.

The government's attitude in handling businesses needs to change. Typically, most government officers will be conservative in issues dealing with businesses. If the rule is not very clear or direct, it is quite typical for the civil servant to reject the application or to say no to the businessman. This is unfortunate and detrimental to the entrepreneurial landscape. Often, the entrepreneur or businessman is sent on a wild goose chase to obtain answers. It is also quite typical for the civil servant to push the businessman from one government agency to another, sometimes asking for a prior approval to be given by another

government department before they will even look at the issue. If every government agency behaves this way, the matter goes round in circles. To create a much more conducive environment, it is necessary for the government and its civil servants to operate in a more efficient manner. Instead of rejecting a request or a business application just because it does not completely comply with the government's requirements, the agencies or the civil servant should try to work around the problem but within the spirit of maintaining consistency and the required regulations. It is much easier for the government civil servant to navigate through the whole bureaucracy than it is for the poor businessman who gets lost searching through a mountain of regulations.

In other words, the government should be pro-enterprise and not pose obstacles. The civil servants should see themselves as partners and facilitators of private enterprises rather than as policemen of the system. This is a difficult thing to do particularly since the way civil servants are compensated, rewarded or punished promotes conservatism, intolerance to failure, as well as a no-mistakes-allowed policy. What is needed is another change in mindset enabling the creation of an entrepreneurial civil service. This will be an environment where mistakes and failures are taken as a plus when used as lessons learnt for facilitating to do a better job the next time around. Also, being able to challenge policies or taking a wider view of the intent of the policies, must be encouraged and considered a better option than executing policies blindly.

It is therefore recommended to have a useful body, independent of the government ministries, to be assigned as the middleman in assessing the way policies and rules are implemented. This body must have enough authority to liaise with civil servants in the active addressing of complaints, feedback, and suggestions from the private sector as well as the public, pertaining to issues related to the conducting of business.

In Singapore, in the year 2000, a panel was set up for exactly this purpose. It is called the Pro-Enterprise Panel and it acts as the channel for resolving issues and changing rules where required that stand in the way of conducting effective business processes. The Pro-Enterprise Panel consists of 50 per cent top civil servants and 50 per cent individuals from the private sector. However, while the panel has reviewed over a thousand rules and suggestions on polices, only slightly more than 50 percent of these have resulted in changes to rules or regulations, or a change in the way a rule is implemented.

If we look at the more entrepreneurial economies around the world, like the USA, Taiwan, and Israel, rules and regulations are developed around SMEs as the basis of how businesses would conduct themselves and be regulated. It follows that, if a rule or regulation works for an SME, then there should be no problems for bigger companies to operate under the same regime of rules and regulations. However, the reverse is definitely not true. In an environment in which the rules and regulations have been made with bigger companies as the basis, it can become very difficult for smaller companies to operate efficiently under those rules. In Singapore, most rules were developed for bigger companies to operate, especially for multinational companies and GLCs. As such, smaller companies faced difficulties when they had to comply with some of these rules. It is therefore very useful to re-scrutinise all existing rules with a view to modifying them to better suit smaller companies. This will certainly create a more conducive entrepreneurial environment. Not only will smaller companies do well in such an economy, but it will also encourage the bigger companies to behave in a more entrepreneurial manner, thus creating a more vibrant economy. Last but not least, it will help create a more entrepreneurial government and civil service.

Another very simple example in the case of Singapore is how the many incentive schemes have been developed. On the surface, all the schemes should be of greater benefit to the smaller companies, as the schemes consist mainly of government grants, subsidies, and tax incentives. However, if we look at the track record, the bigger companies, particularly the multinationals and the GLCs, have an easier time applying for and obtaining approval for these schemes, which are administered by the civil servants. Most of these schemes and their application and approval processes were put in place with the bigger companies in mind. The smaller companies inevitably find problems navigating through the processes. Had the schemes been devised with the smaller companies as the centre-stage, the outcome would be very different. As such, the SMEs in Singapore must firstly have the feeling of assurance that such incentives schemes are meant to facilitate and accelerate their progress and growth, in particular schemes aiding SMEs in their exploration into international markets. They must see the government as an effective business partner before accepting or applying for such incentive schemes. Otherwise, the value of these schemes will be questioned and may even be viewed as obstacles.

However, there is one niggling bureaucratic issue of how the success rate can be measured for the agencies that are disbursing the incentive schemes and the pain or ease of doing their job. Giving a S\$10m grant to a big MNC is easier to manage and account for than giving S\$1m grants to 10 small companies. The amount of work put in to handle SMEs is 10 times more than dealing with one big MNC in attempting to show the achievement of the government agency giving out a S\$10m grant. Thus, if the Key Performance Indicator (KPI) is the dollar amount the agency disbursed, they will tend to forget about small companies and lean towards focusing on the larger companies. But if the KPI was to account for the number of companies which were

awarded the grants, then the behaviour of the civil servants involved will change.

Regulators are often seen as having a chilling effect on innovation in many countries, especially in tightly regulated industries such as finance and healthcare. Good innovative businesses can run ahead of the rules and this can be viewed as a nightmare for regulators. However, this need not be the case. Governments need to be continually involved to keep up with technological developments that will enable it to respond with the appropriate regulatory framework to accommodate new business models and new technology areas. To balance the need for rules and need for innovation to try new things, some governments have created "Sandboxes" where safe spaces are created to allow for experimentation of new ideas. In China, for example, the implementation of digital money was highly successful as the government allowed experimentation of different technologies and business models and regulated those with a light touch. When things seemed to work, they built regulations around what worked and therefore adoption industrywide was very fast. On the contrary, if the government had come up with tight rules and regulations and expected the private sectors to adapt, many would have failed trying to meet the rules that may not be practical in the first place. Thus, this entrepreneurship-friendly model is one area Singapore needs to look into.

One good news did emerge in Singapore for the entrepreneurial environment in the last few years, prior to 2020. Many sandboxes are created in the FinTech area by entrepreneurs and government working hand in hand that eventually resulted in a vibrant FinTech industry in Singapore. The Monetary Authority of Singapore was able to roll out an initiative to develop digital banks in Singapore, one of the first countries in the region to do so. Being a financial hub, not surprising that entrepreneurs in the FinTech industry in Singapore were the first few to emerge. However, the other industries will need to be quickly addressed too.

The government needs to strike a fine balance between the potentially lethal effects of regulation and their unintended consequences, and the desire to promote further innovation. Take for example, the upheavals from poorly thought-out consequences of regulations relating to the use of personal mobility devices (PMDs) here in Singapore. PMDs include electric scooters, kick scooters, electric unicycles, electric hoover boards, skateboards, roller skates, bicycles, electric bicycles, mobility scooters and electric wheelchairs. Effective 3 April 2020, certain PMDs were not allowed by law to be used on roads, footpaths or on pedestrian-only paths. They can only be used on cycling paths. See Figure 16. However, Singapore has not yet reached the same level as Holland where there is a comprehensive network of many cycle paths or paths meant only for cycles and even having signposted cycle routes. As a result, the economic impact was felt by individual users and affected start-ups in the food delivery space and PMDs start-ups.

Where active mobility devices are allowed to be used

| Path/ Road | Footpath Typically paths beside roads and within HDB estates | Cycling Path Paths marked with 'Cyclist' or 'PCN' logos | Road Except for expressways and road tunnels |
|---|---|---|---|
| Device type |  |  |  |
| Bicycle |   |   |   |
| Power-assisted Bicycle (PAB) or e-bike |   |   |   |
| Motorised Personal Mobility Device (PMD) e.g. e-scooter, e-unicycle, hoverboard* |   |   |   |
| Non-motorised PMD e.g. manual kick scooter |   |   |   |
| Personal Mobility Aid (PMA) e.g. mobility scooter or electric wheelchair |   |   |   |

*From 3 April 2020, the riding of motorised PMDs, including e-scooters, are prohibited from footpaths.

! It is an offence to ride a device on a path or road which it is prohibited from. If caught, you may be subjected to penalties, such as fines up to \$2,000 and jailtime of up to 3 months.

Information is correct as of 3 April 2020.

Land Transport Authority
We Keep Your World Moving

Figure 18: Where active mobility devices are allowed to be used

5.2.2 The Financial Environment

With a more developed and more mature financing environment, the better it will be in not only giving the entrepreneurs in Singapore more confidence in testing their ideas, but also in attracting would-be entrepreneurs from around the world to find their fortunes with funding for their projects in Singapore. If Singapore could develop a very vibrant financing environment, then Singapore will be less likely to lose entrepreneurs who after failing to find the money in Singapore, understandably will leave Singapore for greener pastures where entrepreneurship is more prevalent and funding is more easily available.

If we look at the less entrepreneurially developed economies around the world, one of the issues that stands out very clearly is the lack of a vibrant, financing environment. For example, in Singapore, for many years until the late 1990s, the only significant financing method was bank loans, and the banking industry was so conservative that loans were typically only approved if there was some form of collateral or a security pledged against the loans taken. Of course, the other method was funding from family, friends, and relatives, in addition to own savings. The venture capitalist industry was very immature. Such is the case in most other countries where entrepreneurship has not succeeded in big ways.

In the case of Singapore, after the late 1990s, through the government's efforts, many venture capitalists started setting up their bases in Singapore (through incentives like tax breaks and co-funding by the government). This then became the other extreme end of the financing spectrum - the aggressive equity financing method. The outcome was that the environment did become much more attractive for start-ups. However, if we study the entrepreneurial economies, having financing methods at the two extreme ends of the spectrum, that is, debt financing through bank

loans backed by collaterals on the conservative end of the spectrum, and venture capital funding through equity financing on the aggressive end of the spectrum, are not sufficient to create an entrepreneurial economy. There is in fact a need for a much more vibrant financing environment that fills the gaps between the very extreme ends of the financing methods. Such gaps have to be filled by financing methods, like hybrids of equity and debt, angel investors, credit rating mechanisms that allow banks to assess smaller companies differently from bigger companies, cash flow financing, intellectual property financing, brand financing, junk bonds, expansion funds, buyout funds, and many others. These methods have to be addressed differently between those intending to enter entrepreneurship and SMEs looking to expand overseas. If Singapore can address all these gaps and have a wide variety of financing options to suit companies of differing business models, different sizes and at different points of their life cycles from the time they started, the chances of creating an entrepreneurial economy and of promoting greater entrepreneurship will be greatly enhanced. Subsequently, confidence of SMEs to venture overseas increases as business owners search for more growth.

To make easier the access to business financing, the government must firstly facilitate the process of attracting new financing players and encourage more innovative methods of financing. Secondly, the government also has to step in to fund businesses by leveraging on market mechanisms. This includes risk sharing with financial institutions or co-investing with third party investors. Since the government on its own will not be able to decide which businesses or projects are worth financing, there is certainly a need for some form of market testing to be done. The government should not be picking winners, but rather to serve as a mechanism to increase the chances of businesses attracting the required financing from the market. The government should also not be directly involved in funding companies. By nature of their role and responsibilities, they will have problems picking the companies to invest in.

For example, government agencies will typically pick companies that may already have a track record or give money to bigger companies that are attempting to start another. It is better for the government to involve others, such as a commercial organisation to manage funds, if it wants to provide funds to support companies.

5.2.3 People - The Entrepreneurs

Needless to say, the government has very little direct influence over the entrepreneur who is the one with the ability to identify opportunities in both the local and international markets and has a mindset of creating ideas from scratch. While the government can directly manage the regulatory environment as well as the financial environment, cultivating and growing more entrepreneurs is obviously more challenging or a difficult one for the government to address. However, the one thing the government can do immediately is to attract foreign entrepreneurs to come to Singapore to complement our own small resource base.

In addition, the successful implementation of a conducive regulatory environment and an entrepreneurial-friendly financial environment can facilitate the unleashing of hidden or latent entrepreneurial talents. Entrepreneurs who may have been discovered late can be discovered earlier. Our current adult base would then transform, with many more individuals taking the entrepreneurial path earlier.

However, what the government can really do in this area involves a long-term investment and that is to develop the innovative mindset from childhood, starting from the early stages in education. Entrepreneurship should be a compulsory subject of learning in school and it should start when the child is in primary school, perhaps starting from the eleven-year-olds. This must continue through secondary school and to junior college where students are around eighteen

years old. It is imperative that entrepreneurship be made a compulsory subject and not optional to the students. The Ministry of Education (MOE) must look into creating a curriculum and for a start, the subject need not be examinable. When this curriculum is successfully implemented, MOE can then add variations like project-work, inviting entrepreneurs to interact with students, arranging visitations to companies and organisations. As for polytechnic and university students, entrepreneurship is even more urgently needed to be an examinable subject for those in non-business courses. To be fair to such students, entrepreneurship can be a minor subject, having only a small weightage on their graduation. Once again, Singapore having a limited market, the students must be shown the benefits of expanding into overseas markets, perhaps international marketing can be a sub-topic under the subject. Ultimately, this innovative mindset to be cultivated since childhood, needs to encompass a regional or even worldwide view and not just limited to simply setting up a startup. If we do this correctly, we will then have a chance of inculcating entrepreneurship in a future generation.

As we try to modify our educational system to develop a more creative and entrepreneurial economy, we need to clearly understand what it actually takes to create the spirit of entrepreneurship. We have to be sure of this because the results of our efforts will only be known one generation from now. It's easy to align creativity with entrepreneurship. But is creativity the sole factor that needs to be harnessed? A creative mind thinks of ideas but is not necessarily able to implement the ideas and subsequently convert them into businesses. On the other hand, the innovative mind takes the creative ideas and then thinks of ways to convert these ideas into businesses. Innovation is what makes businesses successful.

Creativity goes in sync with entrepreneurship, but a creative person may not end up being a successful entrepreneur. An entrepreneur uses innovative methods to do feasibility tests on a

new product or solution and makes good use of creative ideas. An entrepreneur can also use ideas that creative people come up with and convert these ideas into successful businesses. It is really a subtle difference, and when the government tries to introduce entrepreneurship development in schools, it must be aware that creativity alone is not enough. If we fail to realise this, we risk missing our goal in our drive to create an entrepreneurial economy. In other words, even the process of scaling up a business needs to be introduced into MOE's curriculum.

At this point, we will break this third ingredient or facilitation into a separate section where we address the education system as well as entrepreneurial training.

5.2.3.1 Education System and Entrepreneurial Training

So how is Singapore doing in its effort to educate and train a more entrepreneurial generation? The basic change needed to achieve this objective is really to create some flexibility and to minimise the fear of failure. In an education system that leans towards academic excellence, the leeway to allow for mistakes gets reduced and subsequently lessening opportunities for people wanting to develop alternative skills that supplement their academic excellence. This then results in a system that places a heavy emphasis on achieving good grades in an examination and test-based system. A flexible education system providing alternate routes to success could have eliminated such sentiments. However, the issue is that there is no way to test for entrepreneurial ability. How does one test creativity? How does one test for innovation or business leadership?

The answer simply is that these are unstructured areas difficult to test. Therefore, we will never be able to identify people of such skills and traits based on the current Singapore education system which we still believe in. As such, the Singapore education system needs to address the

late bloomers. This refers to the people who may have a narrow set of skills, but who may yet be able to become the world's best. As an example, the USA tends to view raw intelligence as a less significant indicator of success, while Singapore tends to view intelligence as the determining characteristic of success. Also, the Singapore system measures intelligence narrowly along the lines of scoring high grades in examinations. While it is easier said than done, the system of education that Singapore currently adopt needs to be rethought if Singapore really want to foster people of entrepreneurial abilities.

While the American system may have worked well, that too has its weaknesses. Certainly, a better system, which takes the best of all systems, can be created. School children should have greater exposure to creativity and entrepreneurship. As such, the education system needs to become much more flexible, to allow diversity and better recognise differing talents such as in sports and arts, not just the academics. Also, a system needs to recognise the existence of late developers and subsequently allows these later developers a second chance. With the change, mindsets will change as they gain momentum while falling in place. The long-term impact is that society is willing to take chances or risks as they will have a chance to come back if they fail in the first instance. For now, children in Singapore are subjected to a major streaming at primary 6 which is the end of their primary schooling education and then again, every two to three years. A child who is a late developer may be put in an education stream that completely left the child out of future academic streams and the assigned channel led him or her to the more vocational streams. To make it worse, society views a lower stream as a dead-end.

All these changes are undoubtedly a step in the correct direction. It will no doubt help in developing an entrepreneurial mindset among the people. Whether or not our children today become entrepreneurs who start companies, the entrepreneurial mindset will come in useful for

them no matter what they do in life after they leave school. We just have to find a way to better measure success and not by academic excellence alone.

Successful entrepreneurs with footprints already in overseas markets must act as role models and mentors for new and aspiring entrepreneurs. With their newfound wealth, they make good angel investors. With their fame, they take on the role of thought leaders to help espouse the virtues of entrepreneurship for the country and contribute to policy making in shaping the future. It will certainly be inspiring when these entrepreneurs share their experiences of not just the initial set up of their business but the excitement and anticipation when planning for overseas expansion. They can give talks to aspiring entrepreneurs or to students in schools and Institutes of Higher Learning (IHLs) to share their stories, to show that they too can do it and to inspire the young to consider taking the entrepreneurial path, not just the safe path, for a career. This area is certainly found wanting in the Singapore entrepreneurial ecosystem. The interfacing between entrepreneurs and would-be entrepreneurs has not been managed in a consistent manner, much on an ad hoc basis. Our recommendation is to have a single governing body or agency created solely to oversee this, ensuring that successful entrepreneurs are consistently interfacing and mentoring new and aspiring entrepreneurs. Progress can also be monitored and measured, subsequently more facilitation can be introduced when required. In fact, the mentoring entrepreneurs can even view their mentees as potential business partners in the near future. This is a good idea as the mentoring entrepreneurs will naturally be selective and driven to make their mentees successful.

It will also certainly be helpful if a coaching and training course on entrepreneurship can be conducted before any entrepreneur can proceed to register his or her company with the Accounting and Corporate Regulatory Authority (ACRA). Duration of the course should be less

than a month and there is no need for a test or exam to be conducted at the end of the course. Formal training is required so that they can evaluate their strengths and weaknesses. Also, this provides the opportunity to work on real business problems while providing opportunities to practise their business skills and interact with others in the course. Participants will learn more as they discuss and exchange their views. In fact, by doing so, a network of entrepreneurs is concurrently achieved and these participants can draw on the network to support each other during their entrepreneurial journey. Such a course will also help participants identify the areas that they need more training on, besides developing good working relationships with fellow members of the workgroup.

5.2.4 Government Initiatives and Infrastructure

Governments have multiple roles. They need to lead the initiative to stimulate activity, fund and mitigate the risks, provide a supportive regulatory environment and take responsive action to address gaps as soon as they are identified. In all these roles, it is important that they remain engaged and enlightened.

The Singapore government certainly has invested in infrastructures such as science parks and research institutes. In terms of deep-tech innovation, the government has also been providing funding in support of related research. Investment to enable infrastructure such as labs and facilities in such research institutes and universities have been ongoing. The added benefit of this kind of investment is that Singapore can attract more global research "talent" so as to supplement the gaps in locally available expertise.

Subsequently, when the value for the research done was being called for, and in response to increasing interest in entrepreneurship involvement, incubation spaces begin to sprout. This is

the case especially seen in universities, which play the vital role of providing cost efficient workspaces for aspiring entrepreneurs as well as lowering some initial start-up barriers for young start-ups

However, investments still need to be continually made to supporting the network of incubators and accelerators, subsequently facilitating the commercialization of the diversified research and technology. Our recommendation is that the government can certainly do more to assist with the matching of the projects to selected potential customers. After all, research just for the sake of research will not be useful. The research has to be translated to enterprises who in turn can contribute to the economy, including aiding employment rate. Too often research projects were created from domestic requirements. Investments into these projects should be selected based on their value both domestically as well as to selected international markets. And as mentioned earlier, the government with its extensive network can facilitate in the matching of these projects to potential overseas customers. Once again, too often we see such potential projects being absorbed into the Government Linked Companies (GLCs), taking away the independence of the entrepreneurs behind such projects. As such, the recommendation is for more matching of such potential projects to the private sector, in particular to SMEs with viable possibilities of expanding overseas. If a GLC is to absorb the project, the hope is that some form of understanding can be arranged whereby the independence of the entrepreneur behind the project is not inhibited.

In Singapore, innovation hot spots such as LaunchPad @ One-North were developed. These hot spots are hubs that will bring together like-minded people in a supportive environment where they can network and leverage on each other. Over time, a self-sustaining ecosystem can develop when the critical energy levels are reached. More of such hubs need to be created with

emphasis on having more local entrepreneurs of Singapore citizenship. Certainly, the beneficial conditions and incentives can be thought out to encourage having more local entrepreneurs and also to locate in such hubs instead of working independently in silo. However, while there is the infrastructure, it is recommended that the government also take the initiative to bring these individual companies together through the introduction of programs within the hub and not wait for them in the hope that they will do so. The government, through the management office of the particular hub, can review the profiles of the companies and match selected companies for potential growth synergy, especially pertaining to overseas expansion.

5.2.5 Collaboration between Institutes of Higher Learning and Small Medium Enterprises

Corporates provide the pathways for intellectual property to be commercialised, particularly from the Institutes of Higher Learning (IHLs). Corporates are always looking for start-ups with market and technology breakthroughs so that they can accelerate their business development activities. They can also provide the required technology to the promising start-ups.

Corporates, with their capability for making substantial financial investments, make good partners for universities. Especially with globalisation, corporates need innovation to make them the market leader and at the fore front of their competitors. As such, there is always the need to drive new businesses, improve existing offerings and constantly reducing costs. Corporates can relate with universities as research collaborators, working together to create new products or applicable solutions for the industry they are in. Alternatively, they can collaborate with universities in the licensing of new intellectual property. This enables the upstreaming of knowledge resulting in commercial fruition.

IHLs also benefit from their collaboration with corporates in terms of enhancement to their

Research and Development (R&D) efforts towards industry demands. Also, IHLs should continue to strengthen the collaboration by establishing student internships with participating corporates who then have the opportunities to provide employment to performing interns. Collaboration with corporates also allows easier access to data which is a vital component to enabling research to be done. Ground data obtained from the industry can sometimes enable more innovative research that cannot be pursued solely in the academic environment.

In Singapore, the collaboration between IHLs and corporates have been carefully cultivated. It is part of the government's initiatives at the national level and made into a policy. What is lacking is having more as well as the same depth of collaboration between IHLs and SMEs in Singapore. This allows SMEs to also have a choice of selecting the best possible performing interns. More importantly, SMEs being smaller in size, allows the interns the opportunities to have a closer experience of the nature of SME business. Certainly, if an intern has the opportunity to associate with the owner of the SME, that intern will have the rare opportunity of absorbing and learning how an entrepreneur thinks. Not just how a company is set up or runs as well as maintaining sustainability, but also acquiring the knowledge of the challenges entrepreneurs face when expanding overseas.

Thus, IHLs need to seek more collaborations with selected SMEs in Singapore and not just exhausting from the projects provided by corporations. Most internships are currently only residing in Singapore. IHLs should ascertain the opportunity of overseas exposure for interns during internship period with selected SMEs who possess such opportunities. The idea here is simply described by one word - Exposure.

5.2.6 Innovation and Enterprise Activities

Having Innovation and Enterprise activities at the national level can help bring awareness and raise the excitement in the ecosystem. They also bring forward the country into the international arena since these large-scale events attract like-minded entrepreneurs, venture capitalists and ecosystem players from around the world. Companies that are scalable can only succeed if they are tied to the global entrepreneurship ecosystems.

The government has been continuously initiating and facilitating such activities in Singapore. To their credit, such activities have also been streamlined to being industry related. Numerous players in the whole ecosystem have been organising technology specific or thematic events where there are gatherings of the global community in Singapore. Although there has been a few of such activities taking place in Singapore, more of such activities taking place here is certainly welcoming. As such, helping to sustain the buzz all year round. However, it does not stop here. The recommendation is that the government can certainly aid the SMEs by laying down conditions to safeguard viable overseas projects or business opportunities to only the SMEs. Without such conditions, MNCs as well as GLCs will certainly come in and the SMEs' chances of winning such projects or opportunities will be slim to almost impossible. Of course, such SMEs will need to meet certain criteria before being presented with these business opportunities. This is important as we want to optimize such business opportunities, thereby ensuring the collaboration is a success and more importantly, the SME achieving a successful overseas venture. This will certainly serve as an encouraging success story to other SMEs planning to expand overseas.

5.3 Summary

An ecosystem that is attractive for entrepreneurship is certainly vital. For Singapore, we need to be clear on what are the vital inputs or ingredients needed to create an entrepreneurial environment. More importantly, this created environment must be conducive for start-ups as well as nurturing for entrepreneurs to thrive and grow, leading to a sustainable overseas expansion.

The notion that entrepreneurship is only inborn must be debunked. If we continue to believe that entrepreneurship is inborn or just a matter of nature, there is really very little we can do to influence entrepreneurship to become ingrained in people and to foster such a desired spirit in people. We must continually strive to believe that entrepreneurship can be taught and nurtured, and that government and society can help to develop the spirit of enterprise and train the entrepreneurial mind. This includes rapidly understanding and acknowledging the smallness of the Singapore market and therefore the need to expand into international markets for sustainability and growth.

In Chapter 5.1, the recommendation is that entrepreneurship be taught as a compulsory subject in school. The Ministry of Education (MOE) should look into drawing out a curriculum, starting as early from upper primary level which is equivalent to an eleven-year-old student. As such, there is an established system where entrepreneurship is communicated and taught to young minds. This increases the pool of potential entrepreneurs and enhances the probability of producing more entrepreneurs who will eventually expand into the overseas markets outside Singapore.

Thus, for a start, as mentioned earlier, there must be a belief that entrepreneurship can be developed and nurtured. This certainly requires nothing short of a change in mindset. It is also vital that the government and society play a part in aiding the process. For Singapore, the government is already involved in so many businesses, social, and political areas to the extent that it becomes difficult for an individual to break into entrepreneurship successfully unless the government does something about it. The people of Singapore are already so used to the government leading the way, looking towards the government to change the direction first before taking the initiative. The government needs to play a dominant role in getting things started and pulling or pushing Singaporeans out of their inertia. Once there is momentum, the government must slowly step back until the whole entrepreneurship momentum can be self-sustainable while driven by the private sector. The government has to quickly comprehend that it should not be directly involved in shaping the entrepreneurial landscape and to allow the private sector to eventually sustain the momentum by itself. While the first step of inciting entrepreneurship starts with the government, it must not end with the government. In the long run, a steady state must be reached where dependence on the government will not be required. In any case, the government will also not be able to do much once the momentum is achieved.

Subsequently in Chapter 5.2, the requirements for brewing a successful entrepreneurial environment were spelt out. With the aid from the survey results as well as the secondary data obtained, 6 recommendations were listed out and carefully elaborated, addressing what can be done to promote entrepreneurship development and succeed in this challenging direction of creating an entrepreneurial economy. Ultimately, what it takes for Singapore SMEs to break into the international markets thereby achieving further growth.

CHAPTER VI: CONCLUSION

6.1 Limitations of the Study

The first survey, using the form in Appendix A, was conducted with non-entrepreneurs, age 21 to 35. This survey was done using semi-structured in-depth questionnaires with open-ended questions and constitutes undergraduate students, postgraduate students and employees of companies and organisations. This survey was crucial to further understand the concerns of non-entrepreneurs when exploring the possibility of entrepreneurship as well as the constraints faced. However, the study was conducted in a qualitative manner with a limited number of only 40 participants, limited to age 21 to 35. As in any survey done, a higher population or sample size certainly helps in the validity of its results. It would be interesting to also include the 35 to 45 age group too for the survey.

The participants were undergraduate students, postgraduate students and employees of companies and organisations. Their individual survey results were grouped together due to the small number of participants in total. With a higher number of participants, it would be interesting to look at how employees of companies and organisations responded as compared to undergraduate and postgraduate students.

The second survey, using the form in Appendix B, was conducted with entrepreneurs or business owners of SMEs who have yet to enter the international markets and are only transacting within the local Singapore market. Aim of this survey was to comprehend the concerns and constraints faced by entrepreneurs and subsequently preventing expansion to markets outside Singapore. This survey was done using semi-structured in-depth questionnaires with open-ended questions and the survey was conducted with 30 entrepreneurs or business owners of SMEs who have yet to enter the international markets and are only transacting within

the local Singapore market. However, the study was conducted in a qualitative manner with a limited number of only 30 participants. As in any survey done, a higher population or sample size certainly helps in the validity of its results.

Their individual survey results were grouped together due to the small number of participants in total. With a higher number of participants, it would be interesting to group the participants in accordance to the industries they belong and look at how the survey results of different industries differ.

For both surveys, one-on-one interviews were conducted to further understand the answers provided to the questions that require further clarification. The possibility of research participants hesitating to share their details as well as the casual manner of conducting the interviews are other limitations in the research design.

6.2 Recommendation for Future Studies

To understand the concerns of non-entrepreneurs when exploring the possibility of entrepreneurship as well as the constraints faced, the first survey was conducted with non-entrepreneurs, age 21 to 35. Participants were undergraduate students, postgraduate students and employees of companies and organisations. The study was conducted in a qualitative manner with a limited number of only 40 participants. For future studies, the recommendation is to conduct a similar study on the concerns of different groups of non-entrepreneurs. This can be grouped into different age groups of students and different age groups of working adults who are employees of companies and organisations. Subsequently, it is recommended that a higher population or sample size be used, so as to facilitate the grouping mentioned and to increase the validity of the results.

In fact, the recommendation is for a single study on a specific group of working adults in Singapore. In particular, employees of companies or organisations in the 30 to 35 age group, after working for 5 years or more. It would be interesting to study the challenges they may face when considering the route of entrepreneurship, especially with the work experience they have already gained.

The second survey was conducted on a general approach to all SME business owners. For future studies, the recommendation is to conduct a similar study on the challenges faced by the Singapore SMEs of each different industry when seeking international expansion. Certainly, the challenges differ for every different industry. Subsequently, it is recommended that a higher population or sample size be used, especially when there is a segregation of the different industries. This will certainly help in the validity of the results obtained.

Subsequently, the recommendation is for a single study on the Singapore SMEs in a specific industry only. It would be interesting to study the challenges these Singapore SMEs may face when seeking overseas expansion within their same industry. Obviously, different industries will face different challenges and it will be a beneficial study if we picked out one or two specific industries. For example, the private education industry in Singapore, with regards to their seeking for overseas expansion, can be further researched and study. A number of Singapore organisations have already expanded overseas with their presence there. Raffles Education is already in China and India, among other countries. Management Development Institute of Singapore has expanded to Malaysia, Tajikistan and Uzbekistan. It will certainly be beneficial to do a study on the challenges these Singapore SMEs in the private education industry face when seeking international markets. In fact, results from this study may prove

very beneficial to the others who are thinking of expanding overseas. While it alone may not be sufficient, it still certainly helps to ride on the good name of Singapore being well-known for its students' stellar performance in mathematics and science. As mentioned earlier, the 2019 edition of Trends in International Mathematics and Science Study (TIMSS) revealed that both primary and secondary level Singaporean students have come out top in rankings for both mathematics and science subjects. The influential Programmed for International Student Assessment (Pisa), run by the Organisation for Economic Co-operation and Development (OECD), places Singapore in 2016 as the top-rated country for mathematics, reading and science with its teenagers coming top in tests for the 3 assessing factors.

6.3 Conclusion

It has become inevitable that the SMEs in Singapore will always feel the pressure of leaving their comfort zones and spread themselves abroad. On the positive side, several promising SMEs are now taking the initial steps in venturing to a neighbouring country while the more established ones are heading further. Just dwelling in the local market is no longer viable for a local SME aiming for sustainability, considering the limitation of the local business environment as well as the increasing local competition. With the low barrier to entry for foreign firms, the Singapore market has become more saturated, thereby increasing the competitive climate. With increasing operating costs and the continual lack of manpower, it has become neither sustainable nor economical for SMEs to continue their operations locally.

By expanding overseas, SMEs can increase their customer while gaining access to resources not available locally. This includes accessing certain strategic innovation through technology partnerships which helps boost their capabilities product offerings. For manufacturing, Singapore companies can tap on the larger talent pool of their neighbours. For instance, manpower cost in a neighbouring country like Indonesia is a fraction of Singapore's. Thus,

products designed in Singapore are manufactured in Indonesia. The end result is a high-quality product but market competitive.

With e-commerce, internationalisation has become more accessible to smaller companies as less costs are involved. Expansion into overseas markets is no longer just a physical process. Thus, smaller players can now showcase their products and services to overseas customers conveniently.

The decision to expand overseas always come with challenges. This includes being unfamiliar with the business environment, the political situation, language barriers, cultural differences and not having the initial connections in a foreign land. Not forgetting there are also concerns on safety, fraud, not receiving the payment by overseas clients for work done and contract defaults in emerging countries. Setting up and securing banking facilities when taking on projects overseas can be nerve-wrecking too. In Singapore, SMEs are used to getting things processed quickly, sometimes within a matter of hours or just a few days. Singapore SMEs must learn to be patient when going overseas as processes may take a longer time to complete.

One key matter that SMEs face is finding the right person to lead the overseas operations, particularly the finding of senior management. Most are likely to prefer the safety and comfort of working in Singapore. Having capable and trusted staff to run overseas operations effectively is certainly a challenge.

In recent years, government agencies, trade associations and chambers as well as companies have been joining hands to "hunt as a pack" when going overseas. This is a positive initiative as all parties stand to gain while the Singapore brand gets further strengthened. More importantly, participating companies can network and benefit from each other's expertise.

According to the Singapore Business Federation National Business Survey 2015, regional economies such as Malaysia, Indonesia and China remain the favourite markets for Singapore SMEs to enter. Emerging markets like Myanmar, Cambodia and Vietnam are quickly gaining attention for venturing into. Besides proximity, these markets are rapidly growing their middle-class population, thereby increasing their demand for consuming products and services. Singapore businesses are also venturing into Latin America, the Caribbean and Africa with the signing of Free Trade Agreements and Memorandums of Understanding. These regions have a large and young population with a rising middle-class, certainly regions of great potential too.

SMEs need to be aware of the calculated risks involved in any attempt to expand overseas and do their due diligence. Having just one foot in the door certainly does not mean an immediate rise in sales or profits. Larger markets such as India and Africa are diverse, requiring additional time and patience to cultivate. As such, attaining a deep understanding of the local business environment and by collaborating with bigger companies or local partners can certainly help to gain a foothold in highly regulated markets. Ultimately, the "can-do" mindset is vital for SMEs to have a higher chance of success. This positive attitude is crucial instead of relying on only schemes or policies. Government support and incentives should be viewed as a supplement only to their internationalisation efforts and certainly not a determinant of their successes.

This study represents a step towards understanding the challenges faced by Singapore SMEs when seeking international markets. From the primary data obtained from the surveys done as well as the secondary data obtained, clearly an ecosystem that is attractive for entrepreneurship is certainly vital. For Singapore, there must be clarity on what are the vital inputs or ingredients needed to create an entrepreneurial environment. This created environment must be conducive for start-ups as well as nurturing for entrepreneurs to thrive and grow, leading to sustainable overseas expansion.

The notion that entrepreneurship is only inborn must be debunked. We must continually strive to believe that entrepreneurship can be taught and nurtured, that government and society can help to develop the spirit of enterprise and train the entrepreneurial mind. This includes rapidly understanding and acknowledging the smallness of the Singapore market and therefore the need to expand into international markets for sustainability and growth. Obviously, this certainly requires nothing short of a change in mindset.

The Ministry of Education (MOE) should look into drawing out a curriculum. As such, there is an established system where entrepreneurship is communicated and taught to young minds while in school. This increases the pool of potential entrepreneurs and enhances the probability of producing more entrepreneurs who will eventually expand into the overseas markets outside Singapore.

It is vital that the government and society get involved in facilitating the process. The Singapore government is already involved in so many businesses, social, and political areas to the extent that it becomes difficult for an individual to break into entrepreneurship successfully. The government needs to be the prominent player in starting the notion of entrepreneurship and constantly influencing the mindset of Singaporeans. Concurrently, educating Singaporeans on the need to internationalise their entrepreneurial ideas as the Singapore market is just too small and limited. Once momentum is attained, the government must slowly step back while allowing the whole entrepreneurship momentum to reach the steady state of sustainability, driven by the private sector. In the long run, the goal is to be autonomous and not dependent on government support.

In this study, the requirements for brewing a successful entrepreneurial environment were spelt out. With the aid from the survey results as well as the secondary data obtained, recommendations were listed out and carefully elaborated, addressing what can be done to promote entrepreneurship development and succeed in this challenging direction of creating an entrepreneurial economy. Ultimately, what it takes for Singapore SMEs to break into the international markets thereby achieving further growth.

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APPENDIX A

Survey 1: Understanding the constraints faced and concerns of Error! Bookmark not defined. non-entrepreneurs when exploring the possibility of entrepreneurship

Age: _____ Gender: _____ Citizenship: _____

Occupation: _____ No. of years working: _____

Highest Level of Education: _____

1. How much do you agree or disagree with the following statement: "I have always been interested in starting my own business."

- a) Strong yes
- b) Yes if earnings within 3 years are higher than being employed
- c) Yes if earnings within 5 years are higher than being employed
- d) Unsure
- e) No interest

Answer: _____

2. How much do you agree or disagree with the following statement: "I am willing to take calculated risks to achieve my goals."

- a) Strongly agree
- b) Somewhat agree
- c) Neutral
- d) Somewhat disagree
- e) Strongly disagree

Answer: _____

3. There is a culture of entrepreneurship in my community.

- a) Strongly agree
- b) Somewhat agree
- c) Unsure
- d) Somewhat disagree
- e) Strongly disagree

Answer: _____

4. Are you prepared to work longer than 12 hours per day?

- a) Strong yes. No problem with that.
- b) Yes but not all the time
- c) Depends. Prefer a work-life balance
- d) Mostly no
- e) Strong no

Answer: _____

5. How willing are you in accepting the disruption to your personal life and relationships when starting a business?

- a) Completely willing
- b) Largely willing
- c) May or may not be willing
- d) Largely unwilling
- e) Completely unwilling

Answer: _____

6. How confident are you of having sufficient financial resources in starting a business?

- a) No issues with financial resources
- b) I am confident to start
- c) Maybe, let's wait and see
- d) I am not so confident to start
- e) Insufficient financial resources prevent me from starting

Answer: _____

7. Do you have the necessary skills and knowledge to start a business?

- a) Strong yes
- b) Largely yes
- c) Maybe, haven't given much thought
- d) Largely no
- e) Strong no

Answer: _____

8. How certain are you of becoming a full-time entrepreneur?

- a) Absolutely no
- b) Likely not
- c) Maybe
- d) Likely to
- e) Absolutely yes

Answer: _____

If your reply is **Absolutely no, Likely not, Maybe**, do let us know your reasons that are preventing you from being more certain of entering entrepreneurship:

9. Have you already identified a viable business idea? Answer: _____

If **yes**, then what is holding you back from proceeding with your idea?

10. Are you aware of the resources available, including financial resources as well as institutional support (e.g. business incubators, training programs), provided by both the government and private sectors to help an individual in starting an entrepreneurial business? Answer: _____

If **yes**, are these resources sufficient to facilitate your starting of a business?

- a) Absolutely sufficient
- b) Mostly sufficient
- c) Neutral
- d) Mostly insufficient
- e) Absolutely insufficient

Answer: _____

If **yes**, please share how you come to know of the availability of such resources?

11. Fear of failure is a common challenge that prevents many individuals from becoming full-time entrepreneurs.

- a) Strongly agree
- b) Somewhat agree
- c) Neutral
- d) Somewhat disagree
- e) Strongly disagree

Answer: _____

If your reply is **Strongly agree, Somewhat agree**, do let us know your reasons or factors arousing this fear of failure:

12. In your opinion, what are the obstacles and risks involved in starting a business?

Many thanks for your consent to the participation of this survey and appreciate the time you have taken to complete the survey.

Please leave your name and contact details below so that we can further contact you for your valued input if required. This is of course optional. We will certainly respect your decision if you choose not to furnish your particulars for future contact. In any case, all information gathered from this survey is kept confidential and not shared to others, except for data study for the generation of my final thesis.

| |
|--------------------|
| Name: _____ |
| Email: _____ |
| Contact No.: _____ |

Thank you

Wan Hong Jim

End of Survey

APPENDIX B

Survey 2: Understanding the constraints faced and concerns of small and medium enterprises (SMEs) in Singapore when seeking international markets

Age: _____ Gender: _____ Citizenship: _____

Highest Level of Education: _____

Company: _____ Position : _____

No. of years with company: _____ Company website: _____

1. Are you aware of potential benefits to your business when entering overseas markets?

- a. Of course, yes
- b. Yes
- c. Not sure, need to find out more
- d. The disadvantages outweigh the benefits
- e. No benefits

Answer: _____

2. Are you familiar with the legal and regulatory requirements involved in conducting business overseas.

- a. Of course, yes
- b. Yes
- c. Somewhat familiar but need to find out more
- d. Somewhat familiar but no interest to find out more
- e. Not familiar

Answer: _____

3. Have you conducted any market research or analysis to identify potential markets for international expansion?

- a. Yes
- b. Somewhat yes but not concrete research
- c. No but intend to within next 12 months
- d. No but intend to
- e. No, don't intend to

Answer: _____

4. How do you assess the level of competition in the overseas markets you are considering?
- Very competitive
 - Competitive but still manageable
 - Somewhat competitive but should enter now
 - Some competition only
 - No competition
- Answer: _____
5. How important is it for you to have a local partner or representative in the foreign market?
- Must have before proceeding with overseas expansion
 - Better to have before proceeding
 - It does not matter, makes no difference
 - Likely not to proceed if no local partner or representative
 - Will not proceed if no local partner or representative
- Answer: _____
6. How confident are you of having sufficient financial resources in expanding overseas?
- No issues with financial resources
 - I am confident to start
 - Maybe, let's wait and see
 - I am not so confident to start
 - Insufficient financial resources prevent me from starting
- Answer: _____
7. Do you have the necessary skills and knowledge to enter a foreign market?
- Strong yes
 - Largely yes
 - Somewhat but not fully
 - Largely no
 - Strong no
- Answer: _____
8. Are you aware of any government programs that support international business expansion?
- Yes, I have applied successfully for at least one of the programs
 - Yes, I have applied but was never granted even for one program
 - Yes, but I have not applied for any
 - No, but I'm not surprised if there are.
 - No, I'm completely unaware there are such programs
- Answer: _____

9. Not being pessimistic but in your opinion, how will you rate the risk of being unsuccessful when expanding overseas?

- a. Extremely high risk
- b. High risk
- c. Moderate risk
- d. Low risk
- e. Very low risk

Answer: _____

10. What are the chances that you will be entering the overseas market within the next 3 years?

- a. Definitely will be entering
- b. Highly to enter
- c. Maybe
- d. Unlikely to enter
- e. Not applicable. I am already in an overseas market

Answer: _____

11. If you are already aware of the government programs or incentives that support international business expansion, do you consider them sufficient in facilitating your overseas expansion?

- a. More than sufficient
- b. Sufficient
- c. May be sufficient, haven't given much thought
- d. Not sufficient
- e. Not Applicable as I am not aware

Answer: _____

If **Not sufficient**, then how can these programs or incentives be further improved?

12. Are you willing to invest in workforce training and development to adapt to the international business environment? Answer: _____

If **No**, then why the unwillingness?

13. What are the major challenges or concerns that you perceive in expanding your business overseas?

14. What are the resources or support do you think would be helpful in facilitating international expansion?

Many thanks for your consent to the participation of this survey and appreciate the time you have taken to complete the survey.

Please leave your name and contact details below so that we can further contact you for your valued input if required. This is of course optional. We will certainly respect your decision if you choose not to furnish your particulars for future contact. In any case, all

information gathered from this survey is kept confidential and not shared to others, except for data study for the generation of my final thesis.

| |
|-------------------|
| Name: _____ |
| Email: _____ |
| Contact No. _____ |

Thank you

Wan Hong Jim

End of Survey