

SUSTAINABLE ENTREPRENEURSHIP
PRACTICES IN MALAYSIAN MANUFACTURING
SMEs: THE INDIVIDUAL, ORGANISATIONAL AND
INSTITUTIONAL IMPACTS

by

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**AMALAN KEUSAHAWANAN MAMPAN DALAM KALANGAN PKS
PEMBUATAN DI MALAYSIA: IMPAK INDIVIDU, ORGANISASI DAN
INSTITUSI**

ABSTRAK

Isu kemampanan merupakan isu yang memberi impak besar kepada perniagaan sejak kebelakangan ini. Ianya merupakan isu global bukan sahaja kepada syarikat besar tetapi juga kepada PKS yang digesa untuk megintegrasikan objektif sosial dan perlindungan alam sekitar dan pada masa yang sama, meningkatkan keuntungan syarikat. Kemampanan sering disalah tafsir sebagai hanya memberi fokus kepada alam sekitar semata-mata. Walaubagaimanapun, di dalam erti kata sebenar, ia merupakan tindakan menguruskan “triple-bottom line” yang merangkumi matlamat ekonomi, sosial dan alam sekitar. Kerangka kajian bagi penyelidikan ini telah dibentuk berdasarkan agenda “triple-bottom line” tersebut. Secara amnya, kajian ini megintegrasikan faktor individu yang merangkumi orientasi mampan, faktor organisasi yang merangkumi modal intelek (manusia, struktur dan hubungan) dan faktor institusi yang merangkumi sokongan kerajaan serta norma sosial sebagai anteseden untuk amalan keusahawanan mampan, manakala prestasi mampan dalam PKS digunakan sebagai pembolehubah bersandar. Teori yang digunakan untuk menghubungkan kesemua anteseden dan pembolehubah bersandar adalah RBV, UET dan *Institutional Theory*. Sebanyak 203 jawapan diterima dan dianalisis menggunakan perisian Smart-PLS. Hasil analisis menunjukkan daripada keseluruhan 8 hipotesis, 5 hipotesis adalah signifikan. Hasil dapatan kajian menunjukkan bahawa usahawan PKS dilihat sedar dan jelas memahami konsep kemampanan dalam prestasi perniagaan mereka. PKS juga sedar akan potensi untuk menjadi mampan dan

kesan faktor individu, organisasi dan institusi dalam amalan perniagaan. Selain itu, hasil analisis juga menyumbang kepada perbincangan yang berterusan mengenai amalan kemampanan dalam PKS pembuatan. Hasil kajian juga menunjukkan bahawa kerajaan mempunyai kuasa yang boleh mempengaruhi cara PKS beroperasi. Kesimpulannya, kajian ini merumuskan bahawa PKS sedar tentang kepentingan amalan mampan dan kesan amalan ini terhadap prestasi mampan perniagaan.

**SUSTAINABLE ENTREPRENEURSHIP PRACTICES IN MALAYSIAN
MANUFACTURING SMEs: THE INDIVIDUAL, ORGANISATIONAL AND
INSTITUTIONAL IMPACTS**

ABSTRACT

Sustainability is an issue that has a profound effect on businesses in recent years. It has become a global business issue in which not only large firms, but SMEs as well are urged to integrate social objectives and environmental agenda along with profit making goal. Sustainability is often misdefined as focusing only on environmental concerns. However, in real sense, it denotes the act of managing the ‘triple bottom line’ that includes the pursuit of economic, social and environmental goals. The research framework for this study is built upon the triple bottom line agenda. Specifically, the study integrates the individual factor that consist of sustainable orientation, organisational factor that consists of intellectual capital (human, structural and relational capital) and institutional factors that consist of government support and social norms as the antecedents of sustainable entrepreneurship practices, whereas sustainable performance of SMEs is treated as the dependent variable. The theories used to link all the antecedents and independent variable is Resource-Based View (RBV), Upper Echelons Theory (UET) and Institutional theory. A total of 203 responses were obtained and analyses were carried out using Smart-PLS software. The results revealed that from eight hypotheses developed, five were significant. The findings demonstrated that SME entrepreneurs are clearly aware and understood the importance of sustainability concept in their business performance. SMEs are now aware of their potential to be sustainable and the effect of the individual, organisational and institutional factor(s) in their business practices. The result of this study also contributes

to the ongoing discussions regarding the sustainable practices in manufacturing SMEs. The result also shows that government hold powerful role that affects the way SMEs operate. It can be concluded that the Mmanufacturing SMEs are aware of the importance to engage in sustainable practices and these practices could eventually translated in their sustainable performance.

Chapter 1

INTRODUCTION

1.0 Introduction

Sustainability in business setting is often defined as managing the “triple bottom line” (TBL) that includes the pursuit of economic, social and environmental goals (Elkington, 1997). Driven by the TBL approach, business establishments are expected to pursue far beyond economic goal whereby they need to also integrate social objective and environmental protection in their balance scorecard (Laughland & Bansal, 2011). In a review conducted by Kim (2012) at the World Economic Forum Network of Global Agenda Councils, Kim highlighted that although the list of world’s top 10 global concerns was dominated by political and economic issues, some key sustainability issues were also at the top of most leaders’ minds. This has somewhat demonstrated the heightened interest and increased awareness towards the issue of sustainability among the world leaders. Also, James (2015, p. 76) in his report highlighted that “given the growing political and commercial importance of climate change agenda, carbon footprints (sustainable practices) has become the predominant factor influencing choice between alternative good. Implied in this report is the fact that nowadays, any form of business establishments, be it large or small, operating in either developed or developing countries, could not ignore the issue of sustainable practices in their operations.

Notably, sustainability is not a new concept in academic writings but it is only recently that many organisations are becoming cognizant of the importance to embrace social and environmental sustainability as core elements in their institutional legitimacy (Moura-Leite & Padgett, 2011). In business arena, deliberation on developing sustainable business models, rethinking of business strategic direction, restructuring of core business processes and integrating reporting to contribute to environmental and social sustainability have started becoming more prevalent (Klettner, Clarke & Boersma, 2014). It is however, unfortunate that the progress towards adopting sustainable business models and practices has been uneven regionally, nationally and across different sectors. Hence, it raises doubts as to whether there is indeed a serious concerted commitment towards sustainability within the commercial setting (Klettner, Clarke & Boersma, 2014), especially in the context of smaller firms.

In Malaysia for instance, consideration on sustainability issues is often concentrated only on those related to environmental protection (Mokhtsim & Salleh, 2013) but not extended to social agenda. Even though this may sound reasonable to some, more serious actions need to be taken to keep the industry players aware of the importance of social agenda. Since 2015, Malaysian government has pledged for a serious commitment to engage in Sustainable Development Goals (SDGs) – which comprises of 17 environmental, economic and social objectives. Nonetheless, Malaysia is still facing heavy criticism with regards to its poor development planning, weak environmental regulations and human rights violations especially in reference to the recent contentious issues of palm oil production and illegal logging and the management of water, transport,

reforestation and use of information technology (Yeoh, 2015; Vaghefi et al., 2015; Razak et al., 2013). In addition, societies worldwide have condemned the traditional “for-profit only” framework that has been largely adopted by business establishments worldwide which is seen as disregarding and abandoning a wide range of social and environmental issues that are detrimental to the nation’s long-term growth and development. In the context of Malaysia for example, there is still reliant heavy reliance on non-renewable as the primary source of energy which is clearly unsustainable and detrimental in the long run (Yeoh, 2015).

It is also noted that despite the emerging concern on the role of large firms in embracing the concept of sustainability, the role of SMEs with regard to sustainability agenda remains underexposed (Bansal & Hoffman, 2012). Demands for SMEs to respond to the sustainability issues are escalating given the recognition that, collectively, SMEs contributed to more than 97% of the total establishments in many countries, including Malaysia. Hence, the impact of their actions and inactions are extremely significant. The increasing scarcity of resources and growing pressure from politics and public to reduce carbon dioxide emissions draw more attention to environmental sustainability (Bretzke & Barkawi, 2012; Weber et al., 2011) especially among SMEs (Smit & Watkins, 2012). Having said that, the focus on sustainability practices among SMEs (i.e., towards community, customers, suppliers, environment and employees) is still vexed with debates and controversy. Amongst the argument for not embracing sustainable practices are; SMEs lack resources that would allow them to identify and implement sustainability initiatives (Wichmann & Wolfgang, 2015; Yacob & Moorthy, 2012). Also, SME entrepreneurs are said to be unclear on what

sustainability entails and how to adopt sustainable measure in their business (Davis & O'Halloran, 2013). That aside, sustainability practices among SMEs cannot be ignored. SMEs are facing increased competitive pressure fueled by globalization, heightened social awareness, legislation and the relaxing of trade barriers and as well as increase in market expansion (Smit & Watkins., 2012). Hence, whether they like it or not, SMEs are forced to consider sustainability issues to remain competitive in the market. It has been reported that until and unless they are specifically instructed to do so, the probability of SMEs to adopt sustainable initiatives is going to be very slow (Davis & O'Halloran, 2013). The Chief Executive Officer of SME Corp Malaysia, Datuk Hafsa Hashim, (2015) pointed out that 80% of our SMEs are still domestically-oriented; hence continuous programs to create awareness and understanding of the importance of sustainability concepts are required should SMEs wish to remain competitive in the global arena.

It has been proposed that in order to embed sustainability practices within SMEs, the approach need to be simple and accessible, able to deliver operational efficiencies, create the door to new business, and cost less money as well as engage and motivate employees (Davis & O'Halloran, 2013). As highlighted by Dr Ayman El-Tarabishy, a Professor in Management from George Washington University's School of Business in the International Council for Small Business (ICSB) USA, another key point on the topic of sustainability is to encourage SMEs to reinvest on human capital in terms of upgrading their skills and knowledge especially pertaining to sustainability (Borneo Post, 2015). Hence, focusing on the intangible resources such as intellectual capital is necessary for SMEs to reduce the barriers

in adopting sustainability approach. It is therefore the interest of this study to look into the sustainable practices adopted by SMEs to enhance sustainable performance of their businesses and in doing so, intellectual capital (i.e. intangible resources) is incorporated as one of the antecedent factor together with sustainable orientation of the SME owners and the role of institutions in promoting sustainable entrepreneurship practices.

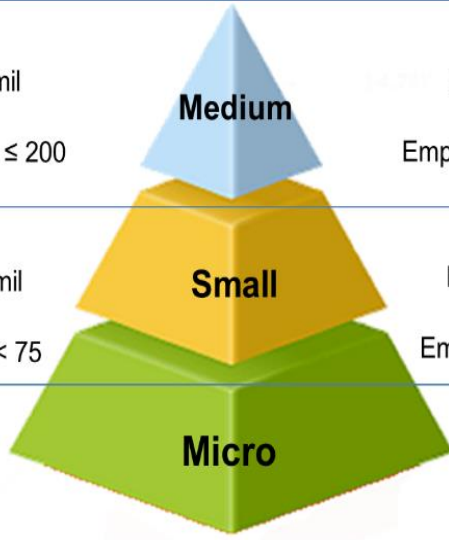
1.1 Background of the Research

1.1.1 Small-and-medium Enterprises (SMEs) and Manufacturing SMEs

In the past, the major focus of research has been directed towards large organisations however, the trend has shifted to SMEs given the multiplicative effects that SMEs have to a country's economy (Hoogendoorn et al., 2014). The definitions of SMEs somewhat vary across countries. For instance, in the United States and Europe, companies with 500 and 250 employees respectively are considered as SME (Ganapathy & David, 2011) while in Malaysia, SME is defined according to size, turnover and activity that fall into two main categories that are manufacturing sectors and service and other sectors. In manufacturing sectors, a company with less than 200 employees and in service and other sectors, employees with less than 75 employees is considered as SME (SME Corp Malaysia, 2016). A more precise definition is depicted in Table 1.1 below:

Table 1.1: Definition of SMEs in Malaysia

Manufacturing	Services and Other Sectors
Sales turnover: RM15 mil ≤ RM50 mil <u>OR</u> Employees: From 75 to ≤ 200	Sales turnover: RM3 mil ≤ RM20 mil <u>OR</u> Employees: From 30 to ≤ 75
Sales turnover: RM300,000 < RM15 mil <u>OR</u> Employees: From 5 to < 75	Sales turnover: RM300,000 < RM3 mil <u>OR</u> Employees: From 5 to < 30
Sales turnover: < RM300,000 <u>OR</u> Employees: < 5	Sales turnover : < RM300,000 <u>OR</u> Employees: < 5



In Malaysia, SMEs represent 97.3% of total establishment in the country (SME Corp Malaysia, 2017) and service sectors dominated 90% of the total SMEs' establishment while manufacturing sectors own 6% and the rest are construction (3%), agriculture (1%) and mining and quarrying (0.1%) (SME Corp Malaysia, 2016).

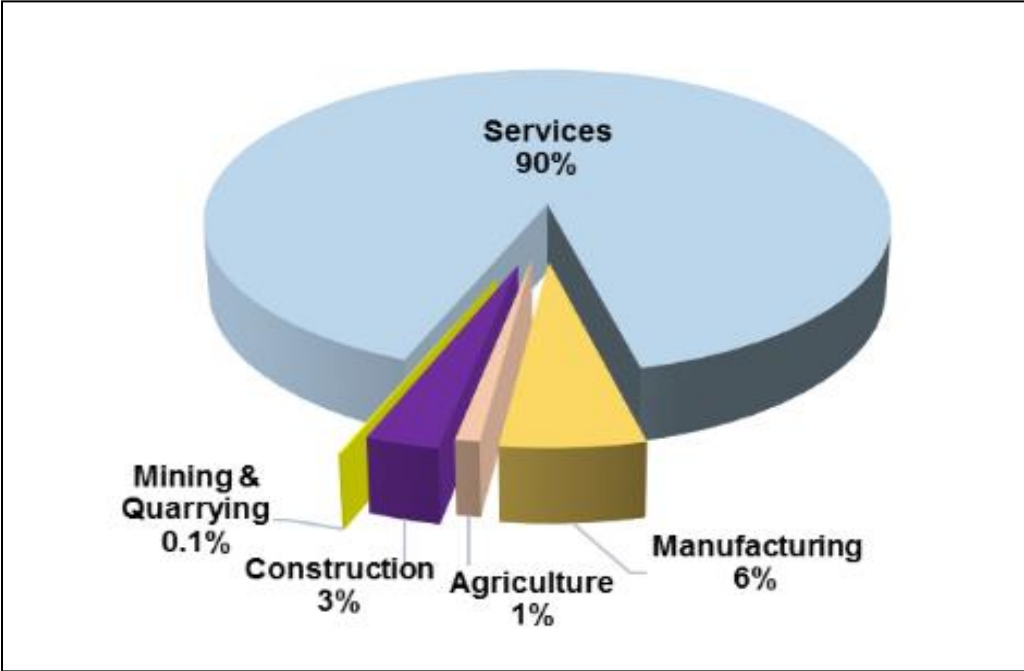


Figure 1.1: Profile of SMEs in Malaysia

SMEs are considered the backbone of an economy (Maximilian, 2013) and important to maintain strong economic growth in any countries (Kloviene & Speziale, 2015). SMEs also represent an essential source of economic growth, dynamic and flexibility in advanced industrialized countries (Maximilian, 2013). Since SMEs can be established in any locality, it is more flexible and exists in rural and urban area without compromising its activities (Khalique et al., 2011). Regardless the degree of development and standard of living of the population in a country, from the economic standpoint, SMEs are the biggest contributors to the gross domestic product (Maximilian, 2013). Besides, they are also the biggest contributors to the employment of labor from a country (Ayyagari et al., 2011; Maximilian, 2013). Specifically, in Malaysia, SMEs are contributing to over 77% of total full-time employment over the country (SME Corp Malaysia, 2016).

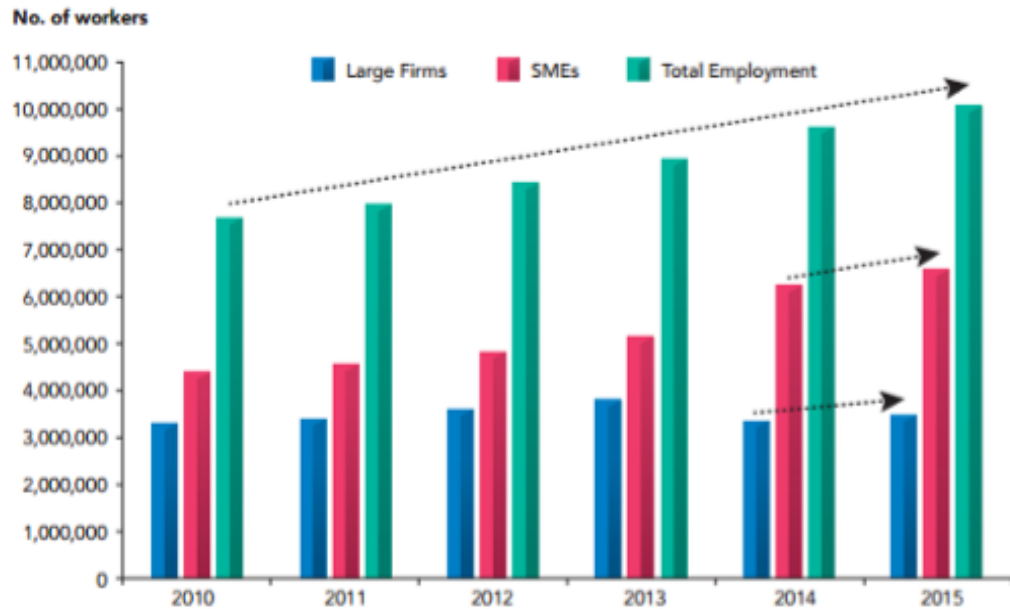


Chart 1.1: Employment by firm size

As for this study, manufacturing SMEs are chosen given evidence that manufacturing SMEs are the major contributors to a large number of environmental issues (Ghazilla et al., 2015; Deif, 2011; Mitchell et al., 2011). Manufacturing SMEs in this study is defined as a firm that has less than 200 employees (SME Corp Malaysia, 2016). Manufacturing SMEs comprises of 37,861 firms from the total SMEs establishment with about 18 sub-sectors as shown in the table below.

Table 1.2: Distribution of SMEs in Manufacturing Sector by Sub-Sector and Size

Distribution of SMEs in Manufacturing Sector by Sub-Sector and Size				
Sub Sector	Micro	Small	Medium	Total SMEs
Textiles & Wearing Apparel	9,123	872	52	10,047
F&B Products	3,278	2,233	505	6,016
Fabricated Metal Products	2,070	1,698	190	3,958
Printing & Reproduction of Recorded Media	1,717	1,145	56	2,918
Machinery & Equipment (including Repair & Installation of Machinery & Equipment)	841	1,178	97	2,116
Furniture	886	847	110	1,843
Rubber & Plastics Products	322	1,126	308	1,756
Wood & Wood Products	499	791	158	1,448
Non-Metallic Mineral Products	484	758	131	1,373
Basic Metal	431	543	109	1,083
E&E Products	231	639	198	1,068
Chemicals & Chemical Products	271	534	156	961
Paper & Paper Products	283	442	103	828
Motor Vehicles, Trailers & Semi-trailers and other transport equipment	242	440	77	759
Leather & Related Products	219	151	6	376
Basic Pharmaceutical Products & Pharmaceutical Preparations	60	115	17	192
Coke & Refined Petroleum Products	19	39	5	63
Tobacco Products	30	27	3	60
Others	613	356	27	996
Totals	21,619	13,934	2,308	37,861

Source: SME Annual Report 2015/2016 (SME Corp, 2016)

Even though the contribution of Manufacturing SMEs to the overall GDP is lower than the services sector as shown in the table below, attention however need to be paid on manufacturing when it comes to sustainable business practices.

Within the scope of the SMEs, manufacturing SMEs is a major sector that generates employment opportunities and contributes approximately 80% of overall country's export and also ranked 17th as the largest exporting country in the world (Tehseen & Ramayah, 2015). It is reported that SME Corp Malaysia

aims to enhance the contributions of SMEs to the country's gross domestic product (GDP) by 42% in the year 2020, from a total of 35.9% in 2014 (Pail, 2015). This is above the benchmark standard for developing nation status as highlighted by the SME Corp Chief Executive Director, Datuk Dr. Hafsah Hashim in the third Asian SME Conference, 2015. Besides that, she added, SME Corp Malaysia strives to increase the contribution of SMEs to 62% employment from 59% and 25% export contribution for the nation from 17.6% in 2015. She also highlighted that the demand for SMEs to respond to the sustainability issues are increasing given the recognition that SMEs collectively contributed to more than 97% of the total establishments in many countries.

Table 1.3: SMEs GDP and Overall GDP Share

	Year 2015 (percentage share to total, %)	
	SME GDP	Overall GDP
Services	58.9	53.5
Manufacturing	21.7	23.0
Agriculture	12.0	8.9
Construction	5.7	4.4
Mining & Quarrying	0.4	9.0
Plus: import duties	1.3	1.3
Total	100	100

Source: SME Annual Report 2015/2016 (SME Corp, 2016)

It is also well noted that despite various support mechanism to encourage environmental practices by the government and other related agencies, many SMEs are still unaware of their responsibility with regard to sustainable practices and ecological footprint (Salimzadeh et al., 2013). According to the US Department of Commerce (2009, p. 5), sustainable manufacturing refers to “the creation of manufactured products that minimize negative environmental impact, conserve energy and natural resources, are safe to employees, communities and consumers and are economically sound”. Clearly, sustainability concept in business are three-pronged; the emphasis on (1) environment, (2) social issues and (3) profit generation. Research on the driving factors of sustainability in business encompasses external factors, including environmental regulation and standards set by governments (Azzone & Bertele, 1994), however, there are other important factors that contribute to the adoption of sustainability practices within the business (Salimzadeh et al., 2013). For instance, firms are striving to achieve long term benefit by adopting sustainability activities as core corporate strategies (Chabowski et al., 2011).

Without negating the important role of service sector in the country’s sustainability agenda, it has however been reported that manufacturing SMEs are largely responsible for the environmental issues (Ghazilla et al., 2015; Deif, 2011; Mitchell et al., 2011). For instance, researchers have alerted that the substantial impact of manufacturing SMEs on the natural environment are estimated to be between 60-70% of total pollution which is markedly higher than the larger industries (Aragon-Correa et al., 2008). Likewise, in another study, it has also been reported that manufacturing SMEs are responsible for around 60% of all

carbon dioxide emissions in which the total impact by SMEs has surpassed the cumulative environmental impact by large firms worldwide (Parker, Redmond & Simpson, 2009; Harris, 2006). Besides, Safaai et al., (2011) estimated that the emissions will increase about 68% by 2020 if no action taken. This is a worrying phenomenon given the huge quantity of SMEs as compared to other business establishments.

According to Salimzadeh et al. (2013), given their smaller size, SMEs are of the opinion that they have little responsibility in managing their sustainable performance and their ecological footprint. Past research has shown that SMEs have lack of awareness of environmental legislation, and the complexity of the legislation can further confuse and prevent businesses from fully understand the implications of being unsustainable (Stokes & Rutherford, 2000). Most of SMEs think that their impact on the environment is minimal (Lee, 2000; Stokes & Rutherford, 2000), therefore do not realize the extent to which environmental issues and legislation affects them (Stokes & Rutherford, 2000). Although some studies have found that there are increasing number of SMEs engaging in at least some environmental activities (Brammer et al., 2011), many still believe that they have no significant impact on the environment (Revell & Blackburn, 2007; Hillary, 2000). The reluctance to consider environmental agenda is also due to the believe that engaging in environmental activities is costly (Revell & Blackburn, 2007; Hillary, 2000; Purvis et al., 2000).

According to Yacob et al. (2013), SME owners/managers that respond positively towards environmental issues and have inclination towards sustainability are more likely to implement sustainable practices. Also, it is

argued that to enhance performance, SMEs should not neglect the role of intellectual capital (Char, 2014; Hitt et al., 2003), hence it is speculated the same should SMEs want to enhance sustainability in business. Beside government intervention, the influence of the society is another push factor for businesses to engage in socially and environmentally responsible actions (Salimzadeh et al., 2013). In congruence with these contentions, the present study attempts to explore those possible connected factors that may contribute to sustainable performance among SMEs. Antecedents are chosen based on the stated factors that posed three different levels which include individual factor, organisational factor and institutional factors. Specifically, sustainable orientation, intellectual capital, government support and social norms are chosen as antecedents while sustainable entrepreneurship practices are treated as the independent variables that may affect sustainable performance among SMEs.

An avenue to maintain performance given the changes that are taking place especially the heightened awareness in sustainability agenda, SMEs are urged to follow the rules that has been set up whether direct (Government regulations) or indirectly (norms and cultures) to stay longer in the society. Thus, practicing sustainable management to meet the non-financial needs in the society is one of the most considerable commitments that companies must think of. Although in the past research scholars introduce various driving factors of sustainability performance such as external factors, including environmental regulation and standards set by governments (Azzone & Bertele, 1994) there are some important reasons which contribute to the adoption of sustainability practices within the business (Salimzadeh et al., 2013). For instance, firms are striving to achieve long

term benefit by adopting sustainability activities as core corporate issues (Chabowski et al., 2011). Other factors include the raising demands for environmental friendly business practices since increase in awareness and interest on environmental issues in the last few years and in Malaysia specifically, the government has made strong commitment to strengthen sustainability development (Yacob et al., 2013). It is witnessed that Malaysia government has put their intervention programmes to support SMEs especially after the launch of SMEs Master Plan in 2012 and the introduction of Asean Economic Community (AEC) in 2015. Hence, to deal with the challenges and opportunities that come along with the recent development in the global economic landscape, SMEs need to be prepared and be aware of the contemporary issues and current challenges including the issues of sustainable business practices. It is known that the SMEs are still struggling to overcome the domestic challenges, however with the outlined challenges facing SMEs in the SME Master Plan as well as the introduction of AEC, SMEs have no choice but to adopt the contemporary practices that are recognized by the stakeholders. Thus, amongst the challenges that SMEs need to be aware of is sustainable practices in operating their businesses.

1.1.1(a) SMEs Challenges

1.1.1(a)(i) SMEs Master Plan

In 2012, SMEs Master Plan was first introduced and formulated to further accelerate the development of SMEs (SME Corp Malaysia, 2012). The aim of the master plan is to transform SMEs to accelerate the economic development of

Malaysia (SME Corp Malaysia, 2012). In the “The Saudi Gazette” (2012), Parker reported that Malaysian SMEs is set to receive a major boost over the next eight years according to recent updated SMEs Master Plan that comprises "Small Medium Enterprise Master Plan 2012-2020: Catalyzing Growth and Income (SME Masterplan 2012-2020)". Malaysia Prime Minister, Najib Razak, at the SMEs new Master Plan launch at Kuala Lumpur in 2012; sees the new Master Plan as the "game changer", in conjunction with the World Bank Group to accelerate the growth of SMEs to help achieve the Malaysian goal of high-income nation status by 2020. He also stressed that "Unless we introduce a 'game changer', we will be caught in a middle-income trap, whereby we are no longer as competitive on cost as some countries”.

SMEs must move up to be the first-tier suppliers of the large enterprises and be connected to the global supply chain (SME Corp Malaysia, 2012) to realize the target achievement of GDP contribution from 32% to 41% by 2020. Besides the employment creation and increasing total export value, this connection will require the SMEs to comply with environmentally- and socially-friendly practices of the global supply chain (Andersen & Skjoett-Larsen, 2009) since there is raising demands for environmental friendly business practices and interest on environmental issues to strengthen sustainability development (Yacob et al., 2013). Hence, manufacturing SMEs are the role plays to cope with the “game changer” since its environmental impact are higher than the other sectors.

1.1.1(a)(ii) Asean Economic Community (AEC)

AEC is the single market and production base which aims to allow free flow of goods, services, investment and skilled labor and the freer movement of capital across ASEAN region (24th ASEAN Summit, 2014). Besides, the creation of AEC is to integrate the economy of all countries under ASEAN as one economy whereby it would be the seventh largest in the world with a combined gross domestic product of \$2.4 trillion in 2013 and the fourth largest by 2050 if the growth trends are continued (Groff, 2014).

ASEAN that has population around 600 million are the world's seventh largest economy that is growing at over five per cent per annum. The AEC aims to stimulate the trade between members' nations by reducing and removing barriers to intra-Asean trade (Malley, 2016). This fact makes Malaysia an attractive destination for businesses and investment at a time as in the volatile global markets which shows China's growth is slowing and economies of the United States, Europe and Japan remain weak (Malley, 2016).

The latest survey reported by the largest accounting body that are working in 118 countries around the globe, CPA Australia; shows that the advantages of the AEC to SMEs are well understood with over half of Malaysia's SMEs owners believed that the creation of the AEC will have a positive impact on their business (Malley, 2016). Besides, CPA Australia also stated that with the establishment of AEC, the SMEs in Malaysia and other Asian countries are well-placed to make the most of opportunities in the term of economic development support and growth of jobs in many years to come (Malley, 2016). In addition, at the time of economic challenge including low commodity prices, slowing growth in China and weak

recoveries in the United States, Japan and the euro area can enhance contribution from the broader business community in Malaysia and this fact is more important than to sustaining economic growth (Malley, 2016).

1.1.2 The Importance of Sustainable Practices within Manufacturing SMEs

Despite the emerging concerns on sustainable practices within commercial settings, the role of SMEs within the domain of sustainability remains underexposed (Bansal & Hoffman, 2012). It is reported that the majority of SMEs perceived sustainable and environmental issues as a not critical aspect in the business (Yacob et al., 2013; Ecotec Research & Consulting, 2000) neither do they contribute to business competitive advantage (Wooi & Zailani, 2010). This is given evidence which shows that generally, SMEs are of the opinion that their impacts on the environment are minimal (McKeiver & Gadenne, 2005; Lee, 2000; Stokes & Rutherford, 2000). To an extreme end, some SME owners/managers even reported to be totally unaware of their businesses influence on the environment (NetRegs, 2010; Revell & Blackburn, 2007). In addition, they are also unaware of the importance of sustainability and are often cynical of the benefits of self-regulation and environmental management tools (Mitchell et al., 2011). As a consequence, they are somewhat ignorant of how environmental legislation could affect their businesses (NetRegs, 2010; Stokes & Rutherford, 2000). With such limited understanding and awareness of how sustainable practices could eventually impact the survival of their business, it is deemed timely that this study be undertaken. This is also given the fact that although they are small, collectively, these small enterprises could contribute to the large share of

pollutions in the world (ECEI, 2010; Hillary, 2000). It is with such realization that SMEs must start to be cognizant of their roles in promoting sustainable practices.

As highlighted earlier, SMEs generally have little knowledge about sustainable issues and lack understanding of the concept (Yacob & Moorthy, 2012). Nevertheless, given the changes that take place in the social, political and environmental landscape, SMEs are struggling to meet the uprising social demands to focus on social and environmental issues (Maximilian, 2013). Parker, Redmond and Simpson (2009) pointed out that SMEs are responsible for around 60% of all carbon dioxide emissions in which the total impact by SMEs has surpassed the cumulative environmental impact by large firms worldwide. In Malaysia alone, carbon emissions are estimated to increase by 68.86% in 2020 if immediate actions are not taken to change the conventional business framework (Safaai et al., 2011). This in turn will directly affect the socio-economic condition of society (Mokthsim & Salleh, 2014). On top of that, Malaysia is ranked 30th in terms of the largest carbon dioxide emitter in the world by U.S. Energy Information Administration (EIA) (2015) whereas the International Energy Agency (IEA)(2014) reported that carbon emission contributed by Malaysia are comparatively 0.64% of global total emission of 30,655.4 million ton. This huge number of carbon emissions will put our country in a great danger and in high risk of instability and unsustainable path of development (Zaid et al., 2014) which will indirectly affect the mission of our country to achieve competitive industry by 2020.

It has been highlighted that due to the significant impact of SMEs in economic, society and environment aspects, ignoring SMEs in research of this

kind is “totally inappropriate” (Spence & Lozano, 2000). For instance, SMEs can be of particular significant on green concept as their total impact towards environmental degradation is huge (Yacob et al., 2013). Thus, this warrants serious efforts to look into the factors that could encourage the development of social and environmental agenda in SMEs. Also, with the limited exploration of sustainable initiatives among SMEs (Johnson & Schaltegger, 2015), sufficient research attention is indeed necessary to help SMEs adopt with sustainability concept (Redmond et al, 2016).

1.2 Problem Statement

1.2.1 Slow Response towards Sustainable Entrepreneurship Practices among SMEs

The conventional way of doing business that focuses merely on making profit is no longer reliable with the current changes in the commercial and social landscape. In this contemporary world, profit is not the only thing that contributes to the company success (Gourmelon, 2015). There has been serious demand on environmental concerns amongst society and the public restlessness has been growing as the environmental and social abuses of the conventional economic model are revealed (Gourmelon, 2015). There are challenges and opportunities that are complex and critical than ever, where the consequences of failure are unimaginable and every decision gives impact across the planet.

The alarming incidences of climate change, environmental degradation and concern over social well-being have grown that cause investors to take a

deeper look into how they manage their businesses (Pantsois, 2015). This has led to the emergence of a contemporary approach of doing business in which entrepreneurs are urged to focus more on the triple bottom line (TBL) or 3P which stands for People, Planet and Profit (Kuckertz & Wagner, 2010). The idea of the TBL was first introduced in 1990s and soon John Elkington reintroduced it as the need to look beyond financial accounting and encourage corporations to also account for their environmental and social impact (Dixon, 2014) which departs from the conventional approach. In doing business, environment and social needs are one of the greatest opportunities to find new markets with profitable growth, more lasting and engaging sources of competitive advantage and the effective ways to minimize cost and risk (Peter, 2011). In the mainstream literature of entrepreneurship, sustainable entrepreneurship stands for a driven concept that focuses on both social and business value to create sustainability (Weidinger, Fischler & Schmidpeter, 2014). Without sustainable entrepreneurship, a nation could neither be able to maintain our affluence nor preserve our environment (Weidinger, Fischler & Schmidpeter, 2014). The scenario in Malaysia has been reported unnerving when it comes to embracing sustainable practices. According to Natarajan and Wyrick (2011), SMEs are very slow and some remains unresponsive towards the call for sustainable entrepreneurship practices. Ong (2015) highlighted that SMEs have limited information on the proper action or practices to be taken, thus, many remain silent when it comes to sustainability mission. It has also been said that SMEs face problems including lack of knowledge, organisational culture, and internal motive that hinders them from implementing sustainable practices (Natarajan & Wyrick, 2011; van der Vorst &

Pimenova, 2004). In this light, it is important to dwell further into factors that could possibly encourage them to embrace and adopt sustainable practices in their business operations. In the attempt to understand the facilitating factors towards sustainable practices, the present study incorporates factors at individual (Sustainable Orientation), organisational (Intellectual Capital) and institutional (Government Support and Social Norm) levels that could possibly affect sustainable practices among manufacturing SMEs in Malaysia. Further explanations on the mentioned factors are available in the next sub-sections.

1.2.2 The Equivocal Findings on the Factors Affecting Sustainable Entrepreneurship Practices in SMEs

Sustainable orientation (SO) in entrepreneurial activities reflects the incorporations of environmental and societal agenda in business operations (Kuckerts & Wagner, 2010) and demonstrates the readiness of the organisations to implement sustainability related activities within the organisations (Tata & Prasad, 2015). Sustainable orientation reflects the individual level of the organisations management where SO denotes the sustainable driving factors from owners/managers of SME itself. In a study by Lucas, Cunningham and Lamberton (2009), they argue that self-orientation upon sustainability is a tool for promoting sustainability among small firms. In response to that, some researchers (see for example, Roxas & Coetzer, 2012; Brouwers, 2010) have also proposed that sustainable orientation is important to determine sustainability practices in the context of SMEs (Roxas & Coetzer, 2012). Nevertheless, research that looks into whether SO affects the adoption of sustainable practices in SMEs

remains underexposed. In light of this, it is presumed that sustainable orientation of the SME owners is crucial in driving the business towards embracing sustainable practices.

In addition, it has been argued that, the more managers are cognizant of how to respond to sustainability agenda, the higher likelihood that the firm could enhance its competitiveness or even its survival (Lubin & Esty, 2010). In doing so, firms should be able to mobilize its resources to work towards sustainable agenda too. Intellectual capital (IC) has been debated as one of the most important resources especially in SMEs (Char, 2014; Hitt et al., 2003; Bontis, 1998). IC is seen as the intangible resources for the organisation that includes human capital, organisational capital and relational capital (Hsu & Fang, 2008; Pablos, 2002; Brennan & Connell, 2000). Brooking (1997) refers intellectual capital as a set of intangible assets that can be stirred to improve organisation's success. Many researchers have tried to assess the extent to which IC contributes towards the value of performance of the organisation especially in SMEs, but the findings remain equivocal (see for instance, Bhatti & Zaheer, 2014; Ali et al., 2010; Makki, 2010). Nevertheless, there are researchers who concluded that IC positively affects organisation performance (Hsu & Wang, 2010; Shabarati, 2010; Cohen & Kaimenakis, 2007; Bontis et al., 2000) and presumably sustainable performance.

According to Pike and Fernstrom (2012), organisations can maximize their value through efficient utilization of their human capital or IC. On that effect, IC should be properly managed and utilized to meet the sustainability agenda. IC is critical for companies to improve performance and keep pace with

competitiveness particularly in the current unpredictable economy (Abdullah & Sofian, 2012). In the case of SMEs in Malaysia, Ngah and Ibrahim (2009) proposed that human, structural and relational capitals are important elements for SMEs competitiveness. According to their study, the size of human capital of SMEs is important because it enables them to create a friendly atmosphere, be creative and provide opportunities to nurture cooperation among its employees whereas for structural capital, they suggest that the structure of SMEs matter because it affects creativity among employees. As for relational capital, SMEs need to be very focused on their target market due to their limited financial resources; hence, maintaining close relationship with the stakeholders such as customers and competitors is important.

As for the government support (GS), Malaysia is known to be a highly institutionalized country in which government intervention is one of the crucial factors that is said to contribute to the performance of SMEs. During the 9th Malaysia Plan (RMK-9) period, RM26 billion had been allocated for SME development programs across the various Ministries and agencies. This comprised 11.6% of the total development expenditure during that period. Altogether, there were about 500 different programs implemented over the 5 years (SME Corp Malaysia, 2012) to help the SMEs. Besides, of the recently endorsed Asean Economic Community (AEC) and the flexible arrangement for international trade are expected to boost SMEs performance through their various changes (SME Corp Malaysia, 2012). With the opening of Malaysia's shore through these arrangements, the policy makers have formulated various policies and programs that focus on environmental friendly and sustainable practices

(SME Corp Malaysia, 2016) to ensure Malaysian SMEs remain competitive in the global arena (Further discussions on this matter is explained in Chapter 2). As such, the present study conjectured that institutional support will assist SMEs especially the manufacturing sector to embrace sustainable practices.

In addition, researchers opined that social norms (SN) could give impact to organisation performance in long-term strategies and plan; thus, social norms could motivate firms to do a good job in term of sustainability performance (Ji et al., 2012). In addition, previous research has found that SN significantly affects intention towards sustainable entrepreneurship (De Clercq & Voronov, 2011; Meek et al., 2010; Vermeir & Verbeke, 2008; Yacob, 2010). Thus, to find prove that it works within Malaysian context, this study examines the influence of SN on sustainable entrepreneurship practices.

It is well noted that the increasing environmental pressures has caused the business environment to change in many ways (Zhu, Sarkis, & Lai, 2012) and the ways SMEs engage in environmentally responsible practices continue to attract research attention (Yacob & Moorthy, 2012). As such, many researchers have investigated the relationship between environmental practices and firm performance, but unfortunately the findings have resulted into conflicting views (Hameed, Hasbullah & Norani, 2015). This is because the lack of consideration on the perception of the benefits of environmental initiatives upon the relationship between sustainable environmental practices and the performance of firms (Hameed, Hasbullah & Norani, 2015). Besides, there is lack of knowledge about the sustainability concept, specifically in Malaysia despite all efforts from governmental and private institutions (Yacob & Moorthy, 2012).