

How Do SMEs Face Sustainability Challenges in the Competition? A Systemic Review

JMSB Jayasundara¹, PSK Rajapakshe², RPIR Prasanna^{3,*}, EMS
Ekanayake⁴, SKN Gamage⁵, GAKNJ Abeyrathne⁶

Department of Environmental Management^{1,2}, Department of Economics^{3,},
Department of Social Sciences^{4,5,6}, Rajarata University of Sri Lanka*

jmsb1610@ssh.rjt.ac.lk¹; pskr75@ssh.rjt.ac.lk²; prasannarjt@ssh.rjt.ac.lk^{3,};
emsekanayake@ssh.rjt.ac.lk⁴; naraddagamage@ssh.rjt.ac.lk⁵*

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ABSTRACT

The biggest challenge of SMEs in the globalization era is the survival and succeeding in the competition. This is mainly due to the less ability of the SMEs to face the three competitive challenges- global challenges, technological challenges, and sustainability challenges. This systemic review aimed to explore the nature of the SMEs' sustainability challenge and investigate the survival and succeeding strategies of SMEs in a broader context of sustainability. The paper reviewed five sustainability challenges cited in the literature, and the review concludes that acknowledgement of sustainability principles by the SMEs could contribute to sustaining the earth's system due to its long-term positive spill-over effects – economic prosperity, societal well-being, and environmental protection - and sustained earth system would support the life in the long run. The long-term maintenance of the philosophical meaning of sustainability in the SMEs would create an earth with no poverty, hunger, and inequality, no environmental degradation, and no disturbance to the product demand and supply.

Keywords: Economic globalization, Ethical business, SMEs, Sustainability challenges

1. Introduction

Small and Medium Enterprises (SMEs) are considered as the backbone of the world's most developed and developing economies. The sector accounts for 90% of the business and 50% employment worldwide, and 40% of the national income of emerging economies (IBRD, 2019). The World Development Report in 2005 and World Trade Report in 2016, published by the World Bank and the World Trade Organization (WTO), respectively, emphasize the importance of SMEs in achieving sustainable growth in the economies while addressing prevailing and emerging challenges in SMEs in the free-market era. Notably, the role of SMEs in addressing various development issues mostly centered in the developing nations such as poverty, inequality, and unemployment, particularly among women and youth, is conclusive (Soon, 1994; IFC, 2011; Asare et. al 2015) It can also contribute to conquering the structural challenges of the developing economies such as limited industrial capacity, lack of innovativeness of the economy, sluggish nature of rural economic growth, and limited, but primary product items in the export basket (Prasanna et. al. 2019).

In the economic globalization era, SMEs face numerous challenges in terms of survival and succeeding due to the rapid change in consumer preferences and product competition. The recent literature outlines three competitive challenges faced by the business firms, i.e., global challenge, technological challenge, and sustainability challenge (WTO, 2016). Mainly, the promotion of neo-liberal economic principles in the economies, particularly free-market policies in the global trade as advocated by the World Trade Organization (WTO) since 1995, has put SMEs in most developing countries into a severe condition due to the SMEs' less ability to face competitive challenges (WTO, 2016). As a result, the WTO (WTO, 2016) released a report on the title – Levelling the Trading Field for SMEs- and emphasized the need to address confronted issues facing SMEs in the globalization era. As highlighted by Auwal et. al. (2018), in comparison to larger firms, SMEs in the modern world is more vulnerable to external economic shocks, and with very low survivability chance in the competition. They further emphasize the importance of SMEs' positive response to environmental pressure to gain a competitive advantage. Like other competitive challenges, sustainability

challenges of the SMEs are becoming a topical subject in academic literature because of long-term recognition of the SMEs as an engine of sustainable economic development in both developed and developing nations (IBRD, 2005). Thus, this systemic review aims to explore the nature of the SMEs' sustainability challenge and investigate the survivability and succeeding factors of the SMEs in a broader definition of sustainability.

The paper was structured as follows; the first section is devoted to articulate the research problem and objective; the second section defines the key terms of the review – SMEs and SMEs sustainability; the third section conceptualizes the research problems; the fourth section explains the adopted methodology by the study, and subsequently, critically review existing literature to answer the conceptualized problem in the third section – what are the survival and succeeding factors of SMEs' sustainability in the globalization era; and finally, the study provides concluding points over the research subject.

2. Defining the terms – SMEs and SMEs sustainability

The countries and international organizations have used different indicators in defining SMEs concerning the characteristics specific to the sector, region, and the state. These indicators are the number of employees, annual turnover, capital assets, input usage, production capacity, level of technology adoption, and management practices. A majority of countries in the world define the lower and upper levels of thresholds of the Small and Medium Enterprises as firms with 10 to 50 and 50 to 250, respectively (IFC, 2011). The World Bank defines the SMEs and large firms in their recent Enterprise Survey using the employment size of the firm—5–19, 20–99, and 100+ as small, medium, and large, respectively (World Bank, 2017; Prasanna et. al. 2019).

The term 'sustainable development' has a broad meaning, and it first came into the attention of academia through the Brundtland Commission in 1987 (WCED, 1987). It defined the term *sustainable development* as 'meeting the needs of the present generation without adversely affecting the conditions of future generations.' The report indicates that sustainability in the development process is a matter of global environmental problems and a non-sustainable pattern of consumption and production, particularly in the North. The

sustainability term emerged as a critical terminology in the business firms during economic globalization due to the repercussions of unsustainable production and consumption patterns practiced during the last century on the environment. Notably, the global production and consumption patterns have not adequately respected the progress of the environment and human well-being.

During the last century, the increased release of greenhouse gas emissions and carbon dioxide (CO₂) emissions to the earth is reported mainly due to the emerged massive industrialized production system in the world (Vasylieva, 2019). According to GEA (GEA, 2012), fossil fuel, the primary energy source of the world, accounts for 64% and 84% of total greenhouse gas emissions and carbon dioxide (CO₂) emissions, respectively. From 1959 to 2016, the period of global output increased drastically by massive industrialization, and the atmospheric concentration of CO₂ increased thrice from 0.96 ppm/year to 2.93 ppm/year, respectively (Dlugokencky and Tans, 2017). Concerning this global issue, most developed and less-developed countries agreed and signed the Kyoto Protocol in 1997, aiming to reduce environmental pollution generated mainly by the industrialized production system.

Global warming and climate change are two devastating issues the world experiences today due to the degradation of environmental quality (Haseeb et. al, 2019). Hence, the countries are advocated to practice the green concepts in formulating the economic policies to promote low carbon emissions in the production and consumption process (Obradovic et. al, 2017; Nugraha and Osman, 2017). Also, the cost of environmental pollution concerning human health is unquestionable (Gerdtham, 2000). Studies have noted the possible association between environmental pollution and human health due to the increasing number of mortality and morbidity in developing countries (Haseeb, 2019).

There is a contentious academic discussion over development and marginalization or exclusion in the era of economic globalization. Sen (2000), who made an influential contribution to the topic of social exclusion, explains marginalization and deprivation as unintended results of the development process or policy decisions. By considering this exclusion of grassroots from the development process, the World Bank emphasized the need for attacking

poverty of the world by releasing its World Development Report in 2000 (IBRD, 2000). Furthermore, the United Nations was established to eradicate poverty and hunger, and no poverty as the first goals of the Millennium Development Goals (MDGs) in 2000 and Sustainable Development Goals (SDGs) in 2015, respectively. Thus, definitions of growth and development were reshaped, acknowledging the ethical principles in global economic activities. Considering these facts, the Dow Jones Sustainability Group Index defined the term *sustainability* as ‘a business approach established to create long-term shareholder value by accepting opportunities and managing risks derived from environmental, social, and economic developments.’ It acknowledges the economic growth, environmental stewardship, and social progress, as indicated in the triple bottom line—and it confirms the stability of the earth system and its continuing ability to support life.

3. Theoretical Discussion of firm sustainability

Discussions on competitive challenges enter the forefront of the business community due to revolutionary changes happened in the society, economy, and the environment. According to the recent literature on SMEs, several factors are triggering social, economic, and environmental changes—Globalization (Sener et. al, 2014), financial creativity (Schinckus, 2017), national political-economic changes of a country (Soon and Huat, 1990), and innovation (Santos et. al, 2014). Auwal (2018) highlighted that SMEs in the modern world are not only complicated but also facing a series of challenges as they are less capable of meeting the competition, compared to larger organizations. Therefore, it is quite challenging for SMEs’ to remain competitive in the complex and competitive business world while following sustainable practices.

The term *Sustainability* is derived from ecology and referred to ‘the potential of an ecosystem to subsist over time’ (Reboratti, 1999); when applying this concept to society, the term reforms into sustainable development. Again, in business literature, the term sustainability is used in the discussions of firm sustainability. However, the concept further developed under the broader definition of sustainable development. Therefore, it is useful to focus on both terms, i.e., sustainability and sustainable development, in debating sustainability as a competitive challenge.

The term *Sustainable development*: The concept of sustainable development has been developed from ‘Limits to Growth’ in 1972 (Medow et. al, 1972), ‘World Conservation Strategy’ in 1980 (IUCN, 1980), Brundtland Report in 1987 (WCED, 1987), Agenda 21 in 1992, MDGs in 2000, and SDGs in 2015. This notion implies the proper balance of society, environment, and economy in our global development process that assures the sustainability of our earth system.

Applying this concept to the global business required a reconceptualization of the traditional approach, centered on economic growth and development. Reconceptualization is essential due to limits to growing into an ecocentric position despite traditional anthropocentric position (Medow, 1972). Sustainable development stands on three pillars– the society, ecology, and economy– and merging the needs of the three produces sustainable development, i.e., more merge, more sustainable development. The needs of the three pillars are equity, sustainability, and profit, respectively. This approach, introduced in the Brundtland report, is laid between anthropocentric and ecocentric positions (Baker, 2006). Environmental Kuznets curve presented by Simon Kuznets in 1955 suggests that in the post-industrial stage, the increasing per capita income reduces pollution because of the green technology development (Baker, 2006). Accordingly, it can be expected that the performance of two other areas, equity and profit, also improves with balanced development. However, the ideal model of sustainable development supports the ecocentric philosophy (Baker, 2006). Eastern Philosophies, notably Buddhism, have shown the middle path for all human activities. This progress of the concept of sustainable development helps to understand the concept of firm sustainability.

Sustainability focuses on a company’s ability to survive and succeed in a highly competitive and dynamic environment. It relies on the extent to which a company can meet the needs of the stakeholders by seeing that the company succeeds. Further, the business model should be sustainable to be a firm lasting (Noe et. al, 2017). Therefore, for firms to express the term ‘sustainability’ in the context of business entities, they should incorporate the mentioned three principles (social well-being, environmental protection, and economic prosperity) as per their practices, policies, and products (Masocha,

2018). Managing the sustainability of institutions will involve the development of social measures, the internal environment, and the external contribution to sustainability within the society and in the economy (Johnson and Stefan, 2015). Accordingly, the institutions require to work out measures for the sustainability of the self in the changing environmental conditions and contribute to the sustainability of the society, the economy of the country, and the world as well. Thus, it is essential to identify the challenges generated by the environmental changes, present demand patterns of the society, and the economy for the appropriate existence of firms.

Sustainability is an approach which the world organizations progressively adopt into their business activities. As discussed in section 3, the term sustainability was initially recognized as an environmental-related phenomenon (Barbier, 1987; Goodland, 1995) and later extended its boundaries by taking into account the social and economic dimensions of the sustainability (Lozano and Huisingh, 2011; Sen, 2013; Caputo et. al, 2018; Auwal et. al, 2018).

4. Conceptualization of the research problem

The main challenge SMEs face in the economic globalization era is survivability and success in the competition. The literature noted that micro and small industries in the developing countries have closed down within a very short period of commencement (Atalay et. al, 2013; Asare et. al, 2015; Ahmedova, 2015; WTO, 2016). It signifies an issue of SMEs' sustainability in the competition. Figure 1 conceptualizes the problem outlined in the literature. It shows three demarcating lines – (3) Succeeding Line, (2) Survivable Line, and (1) Failure Line. In this study, the term 'SMEs sustainability' is identified in the area between the (3) Succeeding Line and (2) Survival Line, as illustrated in Figure 1.

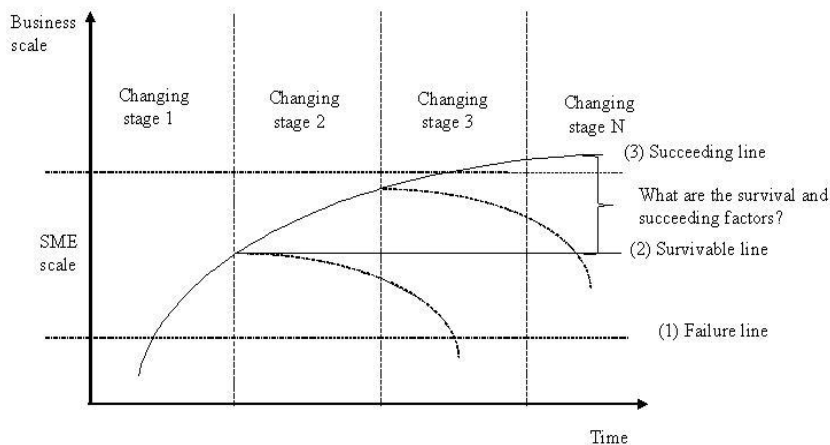


Figure 1. Conceptualization of the research problem – Sustainability of the SMEs in the Competition

By considering the outlined challenges concerning the sustainability of SMEs in the competition, it is essential to investigate the survival and succeeding factors of SMEs in the competition, as closing down of the SMEs within a shorter period of commencement is still a matter highlighted in the literature.

5. Methodology of the study

The central objective of this systemic review of literature is to investigate the existing knowledge on the survival and succeeding factors of the SMEs' sustainability during economic globalization. The study first did reviews to identify sustainability challenges in order to make the framework for literature search. Recent studies in the field have reported five challenges in business sustainability in the economic globalization era (Noe. et. al, 2017). They are (1) business adjusting or flexibility capability to economic and social change, (2) application of ethical business practices, (3) respect to the limited natural resources and environmental values in the business process, (4) consideration of product and services quality, and (5) consideration of stakeholder needs in the business process.

After confining the search into specific five challenges, the web search on the keywords of survival strategies of SMEs, and succeeding strategies of SMEs provided over one million hits. Then, two selection criteria's (1) the impact factor of the journal, and (2) the number of Google citations, were further

applied to filter the high-quality research works to assure the contribution of those papers in generating new knowledge in the field. During the second stage, 253 papers were chosen after considering these criteria. Finally, 83 research papers published by four recognized publishing companies – Elsevier, Taylor & Francis, Emerald, and MDPI, and the reports published by Multilateral Organizations such as the World Bank, International Monetary Fund (IMF), and the World Trade Organization (WTO) were selected. In addition, 29 books and other research materials were referred for the systemic review. The investigation specifically considered the relevance of the papers, reports, books and other research materials in order to achieve the primary objective of this review - to explore the nature of the SMEs' sustainability challenge and investigate the survivability and succeeding factors of the SMEs in a broader definition of sustainability. The main methodological limitation of this systemic review is the selection of papers for this review is purely based on web search (online publications) and limited to publications of four publishing companies. Thus, the study noted this limitation indicating the existing opportunities to further extending the understanding of the reviewed subject. Reviewing the generated knowledge in the field was based on the five themes identified in the first stage.

6. Results and discussion

The review focuses on identifying the survival and succeeding strategies of SMEs in meeting the competitive challenge of sustainability. In this connection, the review centralized on identified five sustainability challenges facing SMEs in the era of economic globalization.

6.1. The ability to deal with economic, environmental, and social changes

The scholars identified different modes of sustainability practices, which aim to deal with economic, environmental, and social changes. Among them, the Sustainable Entrepreneurship Practice (SEP) approach considers three major factors –economic, social and environment (Auwal et. al, 2018). Pagell and Wu (2009) defined Strategic Sustainability Orientation (SSO) as the extent to which organizations respect and committed to the economic, environmental, and social priorities in their decision making. Auwal (2018) explained that the external pressure influences the SEP and SSO in mediating their relationship.

Like large firms, SMEs also confront challenges in maintaining the balance between economic (profit), environment (planet), and social (people) factors, given the limited resources and experiences (Rezei et. al, 2013). Specifically, regulations, legislation, and policies related to the environmental and social issues have been frequently defined in the context of sustainability, and it generally provides the framework to the firms to operate their businesses by following ethical considerations in the business (Zhu and Sarkis, 2004). Thus, the adaptation and ability of the SMEs to deal with economic, environmental, and social changes are crucial for the sustainability of SMEs during economic globalization.

Economic changes could be recognized as a significant challenge for business firms. As cited by Auwal (2018), SMEs are more vulnerable to external economic shocks than major firms. Economic changes mainly refer to the changes in economic conditions, economic policies, and the financial system of the country and the world at large (Gabel and Whitten, 1997). Furthermore, Ahmedova (2015) highlighted the Schumpeter's ideology that the entrepreneur could be identified as the primary agent of economic changes. The underlying reason here is that entrepreneurs are innovators in many areas, including raw materials, products, production methods, markets, and the organization. Ahmedova (2015) explained the works of other economists on the role of entrepreneurs and their importance on the acquisition and processing of the information. They accept as accurate that the entrepreneur is not necessarily a source of a change, but more sufficiently responding to the change. For instance, the WTO under the Agreement on Textiles and Clothing (ATC) decided to liberalize the global trade in textile and clothing phasing out the Multi Fibre Agreement within the ten-year period starting from 1995 to 2005. In order to respond to this global level policy change, Sri Lanka, where the main export item is the garment, took strategic measures to move from low-value items to high-value items, adhering more to ethical business practices such as improving the working conditions, welfare facilities and wages, and adopting green techniques in the production process (Prasanna, 2009). Soon (1994) explained that Singapore was the trading post of the British Empire in the Eastern area in the early 18th century. After gaining independence in 1965, Singapore experienced a significant economic change with the transformation from trade to industrial development. The government

provided attractive tax incentives and better infrastructure facilities, and then substantial investment inflows came from Europe, Japan, and the USA.

Hillary (2004) revealed that SMEs have been responsible for 70% of global industrial pollution leading to natural environmental changes. Global climate changes have increased consumer awareness about the impact of business operations on the natural environment (Aragon-Correa et. al, 2008). Most consumers then concern about the environmental damage caused by a specific product before purchasing the product. Therefore, Sustainable Environmental Practices have been adapted as the remedial for ecological degradation caused by SMEs, which act as a critical factor to compete in global markets (Auwal et. al, 2018) since the consumers are aware of the environmental impact of the commodity they purchased. It is identified as an indirect impact of environmental change. Normally, most SMEs are in urban areas because of the convenience of logistics, banking, finance, and infrastructure (Chatterjee et. al, 2016; Auzzir et. al, 2018). As per Auzzir et al. (2018), most urban areas in the Asian region are in coastal areas that are highly exposed to the risk of natural disasters and climate change. Firms should adopt to the current global climate change for mitigation and building the resilience of future climate. As the future climate change has several projections, the planning should be able to make complex decisions under uncertainty. As revealed by Crick et al. (2018), effective adaptation to and mitigation of environmental change require a correct understanding of the environmental issues. Additionally, this adaptation and mitigation may open a way for more cost-effective production, but most SMEs are not aware of their potentiality. According to Crick et al. (2018), financial barriers are the critical reason for unsustainable adaptation of firms to environmental changes (Shihadeh, 2019).

SMEs face several challenges in the business environment. The business environment can be defined as the sum of all individuals, institutions, and other forces outside to the business but can affect the business performances. Accordingly, SMEs must successfully deal with the business environment challenges to survive, progress, and meet their expectations. As revealed by Donna (2003) and Sull (2005), organizations that remain in business as usual without managing the environmental changes face difficulties in keeping pace with the competition. Hitt et al. (2001) explained that the speed of firms to

respond to environmental change eventually increase the firm's performance. The ability to adapt to environmental change may differ according to the firm size. Nooteboom (1994), Vossen (1998), and Rosenbusch et al. (2011) revealed that the capability of smaller organizations to earn profit by adjusting to the environmental changes is higher than the larger organizations, because of nimbleness, missing hierarchies, and quick decision-making by the small organizations. The managers who make the policy decisions in the firms must be shrewd when they confront such environmental changes. Protogerou et al. (2012) identified that dynamic managerial capability positively influences firm performance by matching the firm's resource base with the changing business environment in which the firm competes.

Encyclopedia Britannica defines 'social changes' as the adaptation of mechanisms within the relevant social structure, value systems, rules of behavior, social organizations, or characterized by changes in cultural symbols. According to Okwiet and Grabara (2013), the creation of new fields, new needs, and profound changes in traditional sectors accelerate social changes. They further emphasize that the firms should go beyond the traditions and attempt to create new products and services to achieve the company's success. Auzzir et al. (2018) report that SMEs play a significant role in social inclusion in many countries. Many researchers have explained that the e-environment provides a range of opportunities to SMEs, which are operating with minimal resources (Sceulovs and Sarkar, 2014; Sung and Kim, 2016). Hence, social media also play a significant role, which goes beyond gathering and communication (Sceulovs and Sarkar, 2014), and utilized for different purposes, including entrepreneurship (Sceulovs and Sarkar, 2014). Increasing demographic pressure in some and the emigration in the other regions have been identified as a significant issue in small business firms (Hitt et. al, 2001).

Furthermore, a continuous reduction of the population is noted in rural areas due to the migration for jobs (Jan, 2015). There is an increasing trend among the educated and young people to migrate, and most of them will never return for permanent residence in their home country (Baldachchino, 2005). It affects SMEs because the lack of skilled workers reduces the innovativeness of SMEs (Hogeforster, 2014), and thereby, the sustainability issue.

Accordingly, improving capabilities to adapt to social, economic, and environmental changes is a severe challenge to SMEs worldwide. Various strategies are available, such as SEP and SSO, to face the challenge. Entrepreneurship is the key to survival and success in the competition, and SMEs possess better capabilities to change than larger entities. However, SMEs are less aware of the potentials of adaptation and find financing as the primary barrier for adaptation.

6.2. Engage in responsible and ethical business practices

The market power has shifted from producers and sellers to buyers and consumers from the beginning of the 21st century (Weinstein, 2012; Turyakira, 2018). Customers have become increasingly mindful and control over markets which positively impact the performance of any business organization, irrespective of its magnitude. Consequently, apart from running business operations in the most economical, efficient, and effective manner, there is an increasing insistence on business organizations to perform more responsible and ethical behavior to survive and succeed in the competitive business world (Khomba and Vermaak, 2012; Turyakira, 2018). Further, because of growing awareness of the importance of such practices, there is an increasing trend among the public of disapproving the unethical and irresponsible firms.

The commitment to core ethical values is crucial for the success of any individual or an organization. Business ethics is defined as the morality and standards of business conduct (Twomey et. al, 2011; Turyakira, 2018), and ethics have secured an essential place in the business environment. Business ethics include how well a business maintain their practices, policies, and the decision-making process while incorporating its core values such as fairness, honesty, trustworthiness, integrity, accountability, transparency, and respect. It is important to note that ethical practices and social responsibility are strongly associated. In the business world, social responsibility is the progressive activities that a company is practicing in the society where it operates, and this entails the responsibility to all stakeholders—customers, employees, and the wider general public (Fulop et. al, 2005).

Businesses must find new avenues for facing competitive challengers to stay longer in business rather than exclusively relying on traditional marketing strategies. Sound ethical and socially responsible practices play a significant role and correlated with business performances. Therefore, business owners and employees must remain highly committed to exercising good faith in the methods they engage, to continuously make profits and sustain in the long run (Twomey et. al, 2011), since failure to adhere to such practices will adversely impact the business performance. Rutherford et al. (2000) found four dilemmas the SMEs encounter: profit maximization, subsistence priority, enlightened self-interest, and social priority. In contrast, business organizations also should realize that ethics, social responsibility, and profit-making can go together with strategic planning; hence they are not conflicting agendas or compromising each other (Ahmad et. al, 2012).

According to Zsolnai (2004), “ethics is not the luxury of advanced economies; it is an indispensable means to foster economic development.” Therefore, ethics should be an integral part of business organizations, which ultimately create benefits for stakeholders associated with a particular business. Ahmad et al. (2012) identified several advantages of adopting business ethics in an organization, such as building a reputation. In turn, the revenue of businesses helps to attract a talented workforce and employees to improve the performance of a business and the productivity of employees. Investors can make their decisions based on business practices and values since primary considerations can comply with regulations such as labor laws and environment, which can collaborate with other firms, both domestically and internationally. Practicing ethical and socially responsible practices provide a competitive advantage for the firms that distinguish itself from its competitors (Ahmad et. al, 2012).

However, despite the consensus over the importance of ethical practices, unethical behaviors have become common in businesses irrespective of their size, and this creates significant risks to business organizations and associated stakeholders (Wiid et al, 2013). Subsequently, SMEs have become the worst affected business entity. It is especially vulnerable to the practices, and consequences of unethical business practice, owing to many reasons such as their size, lack of funds, lack of strategic information, and lack of relevant

alliances to implement ethical practices, particularly in developing countries (Medlin and Green, 2003; Ononogbo et. al, 2016). Failure of the business is the inevitable outcome of unethical and irresponsible business practices; hence the business enterprises can no longer disregard the business ethics regardless of the firm size (Sraboni and Sharmistha. 2011).

Responsible and ethical business practices consist of four interrelated aspects, namely, ethical, legal, social demand, and philanthropic. However, two kinds of schools exist on the issue of responsible and ethical business practices, those who believe that there is a need for a paradigm shift for addressing environmental issues by the business world and those who believe that the environment is a just strategic or subjective rather than normative or an ethical issue (Aragon-Correa et. al, 2008). Conversely, according to Vasquez et al. (2018), sustainability can only be assured through responsible natural resources. However, many owner-managers do not consider environmental concern as a severe issue (Musa et. al, 2016). Therefore, the global business community has not identified the need for environmental sustainability for the survival of the entire global community.

Two approaches, i.e., legal, and ethical, can be identified to assure engagement in responsible and ethical business practices. According to Lin and Lin (2015), several social outcomes related to differentiated behavioral obligations remarkably play a significant role in everyday interactions, including networking, business relationships, and transactions within the firms. Karaev et al. (2007) stated that both ethical and legal functioning measures are essential to reduce the cost of transactions, legal disputes, and administrative procedures. Social demand has increased towards the social responsibility of firms (Gasse, 1994), and individual firms have implemented some changes in their management strategies on environmental sustainability.

It can be summarized that in the modern business environment with the mindful and reasonable customers the firms must follow ethical business practices for achieving sustainability and growth of their businesses. Then they should not just focus the profit maximization and have to shift from some traditional marketing strategies in to the modern. The legal and ethical approaches have been identified as the ways in order to engage with the

ethical business practices. Additionally, that make additional benefits to the firm as well.

6.2.1. Dealing with the ethical and responsibility issues in SMEs

Various management strategies are suggested to improve responsible and ethical business practices. According to Turyakira (2018), dealing with ethical issues in the context of business requires the participatory approach by taking inputs from all stakeholders, a multidisciplinary and multidimensional approach. The inclusive stakeholder-centered approach towards corporate governance not only ensures corporate sustainability for future business operations and profits but also the sustainability of future generations. SME owners should design an appropriate code of ethics as a vital tool for implementing business ethics in their organizations. A code of ethics should clearly mention the ways and means of how the business is planned to deal with environmental concerns and issues (Lashley, 2016).

Subsequently, SME owners and employees should become more educated and aware of business ethics and responsible practices in their organizations. Training on ethical policy and practices should be an integral part of the business organization, and to educate future entrepreneurs on ethical practices of business organizations, universities and higher education institutes in developing countries should implement business ethics as a module (Turyakira, 2018). Hosseininia and Ramezani (2016) pointed out the importance of recruiting a workforce that understands and respects the values and ethical behavior. According to Gasse (1994), a socially responsible environment through business ethics and sustainable development can be proposed as the concern of a business plan.

However, according to Masocha (2018), it is doubtful of the assumption that the significance of SMEs make less impact on the environment, since they may considerably damage the environment. Therefore, it is necessary to reconsider the responsibility with the changing environment. The past literature signifies a need for a paradigm shift in understanding and acting in terms of ethically sound business practices.

6.3. Efficiently use natural resources and protect the environment

It is a growing concern in maintaining the right balance between the business sector expansions and leaving the natural resources for the future generation. In this context, important concepts like *sustainable development* and *eco-efficiency* have been developed and initiated to practice in both developed and developing countries (Vasquez et. al, 2018). The SDGs adopted by the United Nations General Assembly in 2015 has articulated the need for considering sustainable development and the role of each country. Therefore, it is essential for all countries, either developed, developing, or least developed, to enhance their climate change mitigation efforts (UNFCCC, 2015). Moreover, climate changes impact both natural and societal environments, such as increased temperature that resulted in variable precipitation, increased floods, landslides, droughts, sea-level rise, cyclones, and tornados. Therefore, SMEs must be adopted to the changing environment, and they must take necessary measures to mitigate the change. The SMEs must use natural resources effectively, reduce pollution and resource degradation in the long run to maintain the triple bottom line. This can be identified as a pre-requirement to strike a balance in the triple bottom line for all individuals, organizations, and states (Soon and Huat, 1990; Chalhoub, 2011).

According to Auwal (2018), currently, environmental pollution is becoming a dominant issue in Malaysia as a result of increased SMEs activities, which constitute 90% of the total business establishments in the country. Hence SMEs have contributed significantly to environmental degradation that creates detrimental impacts on both present and future generations. Agamuthu (2007) reported that the total annual production of waste amounts to 1.2 million tonnes in Malaysia. They identified that waste generation in Malaysia is projected to increase from 0.122 kg/cap/day in 2009 to 0.210 kg/cap/day by 2025 due to SMEs' activities, particularly in the agro-based industries. Auwal (2018) estimated that SMEs produce 70% of environmental pollution, and in Malaysia, it is now a severe issue since the increased SMEs activities have amounted to 98.5% of the total business establishments in the country.

SMEs incur 17% of the total environmental protection expenditure in Malaysia. As SMEs lack a proper waste disposal system, these firms lead to increase the pollution by hazardous materials and greenhouse gases (Auwal et.

al. 2018). The firms should be large enough to allow adequate environmental protection. Environmental strategy research has not focused on SMEs based on the assumption that SMEs are limiting to regulatory compliance, low degree of public interest, and the difficulty of obtaining data from SMEs (Aragon-Correa et. al, 2008). According to Masocha (2018) government decisions should consider the formulation of policies to stimulate adoption and environmental protection, and also, the government can involve in subsidies and support.

Compared to the latter half of the 20th century, the occurrence of natural disasters has increased by up to 63.4%, deaths (85.11%), and economic loss out of disasters (122.07%) due to SMEs in the 21st century. The increase in deaths and economic losses is higher than the increase in disaster events. The social and economic conditions aggravate the disaster since the rate of increased financial loss is almost as twice as the occurrence of a disaster.

According to global natural disaster statistics, Asia is the most vulnerable region since it consisted of 46% of the global disasters in 2014 in terms of the number of deaths, the number of people affected, and an economic loss accounting for 50% to 70%. In Malaysia, the effect of haze (25%), heat waves (22%), drought (11%), storms (3%), landslides (0%), flood (34%), and other (5%) are considered as the factors contributing to reduced performance of SMEs (Auzzir et. al, 2018). Immerging economies like Thailand and the Philippines reports a similar situation. In Thailand, floods affected 90% of SMEs in 2011, resulting in 2.3 million workers to lose their jobs and reduce the country's GDP by 37%.

Climate change, as a single factor, has a devastating effect on SMEs since natural disasters get aggravated by climatic changes (IPCC, 2015). In 2016, a global survey revealed the most dominant effect of climate change on SME is the heavy rain (22.4%) and drought and heat (20.3%) [87]. Material damage is the major impact of the effect of climate change, consisting of 35% of all losses followed by business interruption involving 26.1%. In the Asia Pacific region, drought and heat comprised 34% of effect domination over heavy rain (21.5%). Business interruption comprised 39.8% of all business impacts, followed by the material damage of 27.3% (Zurich, 2016). Therefore, the

necessity to consider different types of natural resources is highlighted and stressed the need for assessment and management of the impacts in both adaptation and mitigation of climate change.

Different business environments of SMEs adopt two significant categories of strategies, sustainable and non-sustainable, to face the climate changes. SMEs use sustainable adaptations if the conditions of SMEs provide opportunities for business preservation in a disaster situation; if not, the SMEs adopt non-sustainable strategies. According to Crick et al. (2018), the potential for sustainable adaptation is reduced by increased frequency and severity of natural disasters. Explaining further, SMEs tends to adopt unsustainable strategies if the increased occurrence and severity of natural disasters result in the narrowing of the SMEs' role in the economy.

Johnson and Schaltegger (2015) suggest various tools to address internal and external conditions to streamline social measures for sustainability for spatial, temporal, and economic entities. The most common and comprehensive tool for organizing measures for environmental sustainability within an organization could be the environmental management systems (EMS). EMS have ISO 14001, which was amended in 2015. EMS is globally accepted for applying in SMEs, large firms, and multinational enterprises. Therefore, EMS could be one of the best tools to implement environmental sustainability within an organization. Organizations may face some difficulties when implementing EMS, such as rapidly changing the operations and the dislike of paperwork (Cooper, 2011); hence, it is essential to adjust EMS procedures to fit with the management of the particular SME.

Mitchell et al. (2015) stated that CSR is created to combine and integrate all measures directed to address external issues related to the triple-bottom-line. In the management literature, CSR is identified as an issue of strategic management, small business management, regional perspectives in management such as Asian perspective, and corporate governance. Tricker (2015) suggests that CSR can be viewed from several standpoints such as stakeholder, societal, ethical, political, strategy-given, and philanthropic aspects. The study shows that the expectations of governance have changed the direction of compliance becoming mandatory; risk management becomes

an integral part of management and adding CSR and sustainability. According to Tricker (2015), CSR has four levels, namely, economic, legal, ethical, and discretionary.

CSR is a vital business strategy, in which environmental sustainability is a significant component. In strategic management literature, the concept is defined as ‘specific combination of socially beneficial activities the company opts to support with its contribution of time, money, and other resources.’ The five components that support the CSR strategy are, (1) operate honorably and ethically, (2) philanthropy, participate in community service and better the quality of life worldwide, (3) sustain environment, (4) enhance employee well-being and make the company a great place to work, and (5) promote workforce diversity (Thompson, 2016).

The management literature Scarborough & Cornwall (Scarborough, 2016) directs SMEs to address CSR with seven ways that act as external activities to gain environmental sustainability: (1) support local fundraisers, (2) encourage recycling, (3) reduce energy usage, (4) partner with local schools, (5) join in community service, (6) local causes, and (7) create a grant programme.

In *Asian Perspective of Management*, social responsibility is considered as a marketing strategy (Kotler and Keller, 2012). As by Banyan Tree resorts in Singapore and other countries, some companies are engaged in all aspects of ecosystem protection methods (Kotler et al, 2017). Nevertheless, if the outcomes to the environment are vague, some environmental-friendly initiatives may produce adverse effects. For example, Kotler et al. (2017) stated that the promotion of palm oil as fuel for food companies by Nestle resulted in the degradation of rainforests in Indonesia and the extinction of the Orang-utan and the Sun bear. Also, Asian marketing connected with social responsibility relates to Confucian values such as family faith. Kotler et al. (2017) suggest possible positive and negative impacts on environmental sustainability through a Japanese example of the competition with ‘Kmart,’ which shows the winning of the local companies.

6.4. Offer high-quality products and services

The need to ensure the best quality products or services is a critical production planning problem (Bilal and Al-Mqbali, 2015). Leading companies have difficulties in cooperating with SMEs because the SMEs produce inferior quality products (Bonito and Pais, 2018). Asare et al. (2015) suggest offering training to improve the quality of products, while Baldacchino (2005) reports that small island economies do not have sufficient domestic firm rivalry that pushes the firms into higher quality products and services. Government vision to improve the quality of goods and services of SMEs through linking the SMEs with transnational corporations (TNCs) helped improvements (Rogers, 2010), and to encourage the quality, national awards can be offered for quality products to small-scale units as a motivation factor (Hoffman et. al, 1998).

Right technological decisions enable high-quality products at low cost and timely delivery (Bonito and Pais, 2018). SME growth and access to business development services and financing may allow a firm to produce quality products (Choi and Lim, 2017). In Korean SMEs, the policy focus has shifted from ‘financial institutions and systems’ to ‘time and quality product through technology’ (De Vrande et. al, 2009). Further, experiences of Sri Lanka in the garment industry showed that the movement of product categories from low items to niche items improved the competitiveness of the sector during the post MFA era (Prasanna, 2009). Specifically, with the rapid upgrade of technologies in production and value chain system and increased global income, the firms have to improve their product quality and services delivered to the consumers to maintain the product sustainability.

It is advisable to guarantee a quality product by t combination of six factors, namely, link to MNCs, national awards, training, financing, technology decisions, and access to growth in the process of production planning. However, the lack of domestic rivalry is a drawback for producing quality products and services. Government vision to link SMEs with transnational corporations, national quality awards, and item upgrading would help to improve the quality of products.

6.5. Meeting stakeholder needs

According to contemporary management and understanding, stakeholders are the set of interest groups who have relationships with the organization and whose interests are tied to the organization such as employees, suppliers, customers, shareholders, and the community (Noe et. al, 2017). According to Ioanid et al. (2018), stakeholders are the parties affected by companies' decisions; they are the customers, employees and managers, partners in the supply chain, bankers, shareholders, the local community, broader societal interest for the environment, and the state. Here they suggest that stakeholders represent the values and beliefs related to individuals, institutions, and the state in balancing responsibility, accountability, and power through society. Accordingly, a stakeholder can also be any party, with or without any obligation, such as NGOs, the media, and the environmentalists who are concerned about pollution made by organizations.

The societal disclosure of stakeholder faded in the free market 'growth and greed.' Conversely, again in the 21st century, Corporate Social Responsibility (CSR) and sustainability reporting such as Environmental Management Systems (EMS), emerged into the forefront. Therefore, the present challenge is to balance the interests of a diverse set of stakeholders (Ioanid et. al, 2018) as different stakeholders have different opinions based on the culture, political context, and the social system. Therefore, it is essential to understand the needs of all stakeholders and balance them to assure sustainability.

Maarof and Mahmud (2016) report that sustainability and stakeholder management are visible in new corporate performance evaluation and reporting systems. Proactive environmental practices occur due to stakeholder pressure. They exist in a combination of unique capabilities of SMEs, namely, strategic proactivity related to innovativeness and entrepreneurial culture, stakeholder management related with flexibility in managing relationships, and communication of shared vision to the organizational members (IBRD, 2016). Therefore, these unique characteristics of SMEs lead a favorable environment for them to move towards proactive environmental practices to achieve environmental sustainability.

SMEs negatively impact their proactivity on environmental sustainability. SMEs tend to be more harmful by its stakeholders' influence. According to Todaro and Smith (2015), this influence is more potent in situations where large firms subcontract small firms. Since stakeholders of SMEs are less interested in social practices, those firms have less civil pressure, which creates minimum pressure to improve the system (Quayle and Christiansen, 2004). The low interest of stakeholders leads to reduce the effect of decreasing the environment as a priority for smaller businesses (Terence and Soufani, 2003). This possibly explains why environmental reputation is less important for SMEs than larger firms (Webb, 2008). The unresponsiveness of SMEs demonstrates the necessity of regulation as an essential driver (Lefebvre and Lefebvre, 1993).

The analysis reveals that the shared vision, stakeholder management, and strategic proactivity are the three aspects of strategies to meet stakeholder needs.

6.5.1. Shared vision

The shared vision in SMEs is where the vision of the owner is shared among all types of stakeholders, i.e., SMEs' issue is the owners' satisfaction in receiving the agreement of all stakeholders (Choy, 1995). It is essential to share the standard message in the mission statement with the relevant key stakeholders. A well-developed mission statement provides critical insights to stakeholders about the aim of the organization, and they can eventually lead the organization to generate favorable sustainable outcomes (Soon and Huat, 1990). Prediction – the capability of a shared vision - would have a positive influence on the development of proactive sustainability strategies by influencing the innovative-preventive and eco-efficient practices.

6.5.2. Stakeholder management

The SMEs and large firms must manage external and internal stakeholders (Prasanna, 2008), and stakeholder involvement can be enhanced via information sharing and communication (Maarof and Mahamud, 2016). According to Romer (1986), market information is vital for stakeholders to anticipate and exceed customer expectations. It is more valued if there is a trust-based collaborative relationship with stakeholders, especially with non-economic goals. However, different stakeholders may have different and

specific sustainable practices. NGOs usually target large firms as they are most likely to respond (IBRD, 2016).

External stakeholders can positively influence managers' decisions and intentions. SMEs can also engage their suppliers for pollution prevention. Digital transformation is necessary to gain stakeholder commitment (Lee et al, 2010), and lightweight planning tools with a strong business focus will help to understand the stakeholders. Considering the interests of all stakeholders may help to obtain synergies from stakeholder management.

The potential influence of the environmental strategy may not materialize into the development and deployment of stakeholder capabilities for micro-enterprises (Todaro and Smith, 2015).

6.5.3. Strategic proactivity

A small business can get many advantages by adopting sustainability, such as increasing the stakeholder patronage, being a competitive edge in the market, increasing the market share, and improving the shareholder's value (Atalay et al, 2013). According to Atalay et al. (2013), accomplishment in environmental management and stakeholder management leads to improve the quality of life of the society, and Baldacchino (2005) suggests that individualism supports product development at the invention stage, and collectivism is essential during the commercialization stage. Moreover, proactive environment management aids a better understanding of stakeholders' interests (Todaro and Smith, 2015).

The analysis discloses that meeting stakeholder needs mainly require the application of the broader definition of stakeholder, including NGO, media, and environmentalists. The ultimate objective of the consideration of stakeholder needs is to balance the confronting needs. CSR and EMS have been employed by corporations as mechanisms to meet the requirements, and the suggested strategies are shared vision, stakeholder management, and strategic proactivity.

7. Conclusion

The biggest challenge the SMEs face in the globalization era is the survivability and succeed in the competition because global literature reports that many SMEs close down within a shorter period of its commencement. It is mainly due to the SMEs' less ability to face the three competitive challenges - global challenge, technological challenge, and sustainability challenges – during economic globalization. Of them, SME sustainability challenge is gaining interest in academia as the terms 'sustainability', and 'sustainable development' have become keywords of the global development agenda, and SMEs are responsible for a large share of global production. Non-acknowledgment of sustainable principles in worldwide production and consumption has created an unsustainable atmosphere for humans on earth. In this context, this systemic review aimed to explore the nature of the SMEs' sustainability challenge and investigate the survivability and succeeding factors of the SMEs in a broader definition of sustainability. This review defines the term *firm sustainability* as the 'ability of the firm to establish long-term economic prosperity, societal-wellbeing, and environmental protection.' It means the firms should incorporate these principles into their products, policies, and practices. The literature provides five challenges for SME sustainability in the era of economic globalization (see Figure 2). First, SMEs should have the ability to recognize and deal with economic, environmental, and social changes. In this connection, the review noted the importance of firm-level continuous discussion over potential changes in the economy, environment, and society, and thereby their impacts on a shift in production and consumption patterns of their products. The ability to adjust to the changes is high among the SMEs due to their scale and maneuverability. The existing regulatory environments and policies concerning SMEs mostly acknowledge sustainability in a broader context and provide a framework for business firms to adjust to the changes sustainably.

Sustainable environmental practices at the firm level are a critical factor in business success as consumers are much aware of the ecological issues of the production process. It is also essential that a firm go beyond the traditions and provide new products and services to the consumers following the sustainability considerations in the production. Second, engaging with the ethical and responsible business by maintaining core values is a factor of

survival and success of SMEs in the sustainability challenge; it attracts investors and engaged workforce, improve reputation, and comply with low and ease collaboration with other firms. The strategies aimed at the assurance of ethical and responsible practices for SMEs are participatory approach, training on ethical policies, education on ethics policies, and recruit responsible people with business ethics in their practices. Third, the review indicated the need of SMEs' adaptation to the changing environment and taking appropriate measures to mitigate adverse impacts of the environmental change. In this connection, the SMEs' commitment to the responsible use of natural resources, reduce pollution, and resource degradation is highly essential as they play a significant role in the global economy. Fourth, the review revealed that the sustainability challenge of producing quality products could be possible to achieve through providing SMEs access to growth, making technology decisions, training, providing financial support, introducing national awards for quality products and services, and linking SMEs with MNCs. Further, it is relevant to investigate how SMEs perform in the above aspects of quality to make suggestions for quality improvement of the products and services. Fifth, the literature review has broadened the general understanding of the term *stakeholder*. Accordingly, the term includes traditional and non-traditional parties such as customers, shareholders, employees, environmentalists, the community, suppliers, bankers, NGOs, media, and the state. These parties can be categorized into individual, institutional, and state representations and reflect the cultural, political, and social characteristics of a segment. These are rooted in believes and values of a specific culture. In support of SME development, it is essential to investigate these cultural specifications of segments and suggest three strategies, i.e., shared vision, stakeholder management, and strategic proactivity. Thus, adherence to and acknowledgement of sustainability principles in addressing the SMEs' challenges in the competition would immensely contribute to sustaining the earth's system due to its long-term positive spill-over effects – economic prosperity, societal wellbeing, and environmental protection - and sustained earth system would support the life in the long run. Specifically, the long-term maintenance of the philosophical meaning of sustainability in the SMEs would create a world without poverty, hunger, and inequality; no environmental quality degradation; and no disturbance to the product demand and supply. Thus, it is suggested that every SMEs practice sustainability

principles in their geographical and business settings to sustain the earth and receive earth support to life.

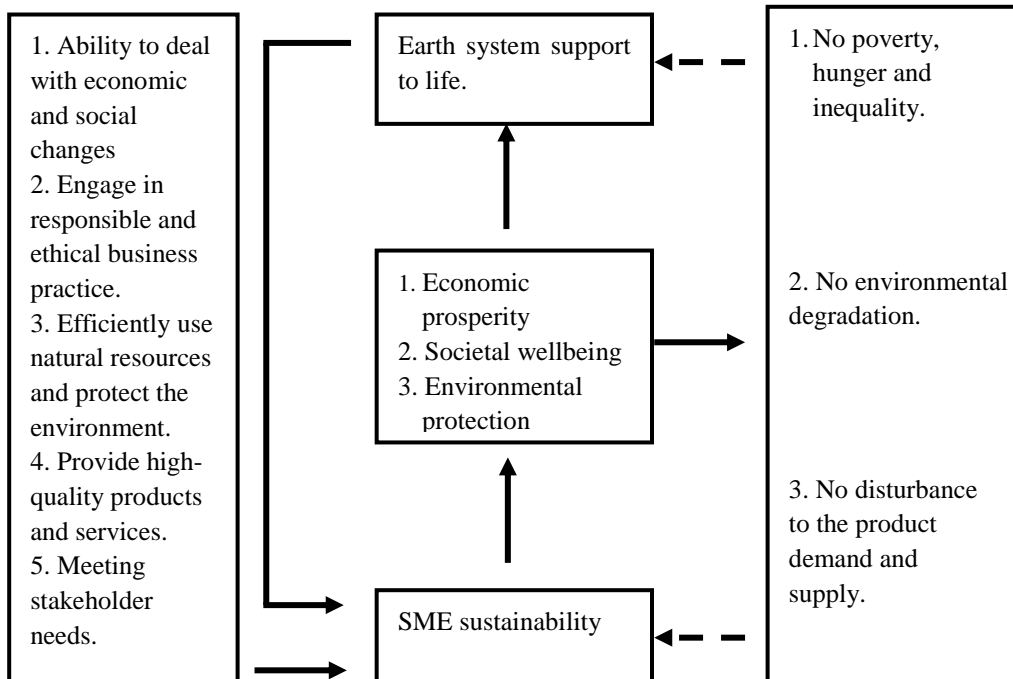


Figure 2. Framework for addressing SMEs sustainability challenge in the competition.

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