

Intellectual Capital as a Panacea to Sustainability in Small and Medium-Scale Enterprises

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Abstract

Small and Medium-scaled Enterprises (SMEs) are regarded as the engine of growth globally, as they play the critical role of economic diversification, job creation, entrepreneurial and technological development as well as revenue generation. Despite their significance, the survival rate of SMEs is shallow, especially in Less Developed Countries (LDCs), which posed a severe threat to macroeconomic stability, and significantly affect their sustainability. The study examines the relationship between Intellectual Capital and the sustainability of small and SMEs in Nigeria. Intellectual Capital (IC) was proxied by knowledge management (KM) and financial literacy (FL), while sustainability was proxied by the Triple Bottom Line (TBL) goals. A critical review of the available literature revealed that both knowledge management and financial literacy are crucial to the sustainability (SUS) of SMEs. The study further revealed that SMEs operators do not have adequate financial literacy, especially as it relates to risk exposure, which creates a threat to their long-term sustainability. The study recommends, therefore, that SMEs operators should double their efforts on knowledge acquisition and training, especially on financial concepts. Finally, the research proposed a framework that could be used by SMEs to gain sustainability.

Key-words: Intellectual Capital, Financial Literacy, Knowledge Management, Sustainability.

1. Introduction

Developing a sustainable business is a big challenge confronting entrepreneurs in emerging economies such as Nigeria (Sunday, 2017). Though it is difficult to harness sustainable process, people or product in emerging markets, but companies must always build a sustainable strategy to fetch out the best of the ideology of "mind-share" and "market-share" (Singh, 2018; Yong, Yusliza, Ramayah & Fawahinmi, 2019). Organizational sustainability might boost the capacities of business entities to appreciate better their customers, employees, host communities and other stockholders to meet up with their expectations which could bring cooperation with the organization (Anifowose, Rashid, Annuar, & Ibrahim, 2018).

SMEs in Nigeria proved to be playing a decisive role and contribute significantly to economic success, especially in the manufacturing sector. They form approximately 70 to 90 per cent of the enterprises in the manufacturing sector, creating over 90 per cent available employment in the manufacturing sub-sector and accounting for approximately 70 per cent of the total jobs generated annually (Eniola, Entebang, & Sakariyau, 2015). The replicated in 2017, where SMEs dominated over 87.2 per cent of Nigeria's substantial economic activities in the education sectors, 27.0 per cent, 23.4 per cent manufacturing, 18.0 per cent wholesale/retail trade, 10.4 per cent public health and social care and 8.4 per cent food and accommodation services. (SMEDAN, 2017).

Despite its importance, however, bankruptcy and failure remained a nightmare to SMEs around the world (Kücher, Mayr, Mitter, Duller, & Feldbauer-Durstmüller, 2020; Salleh et al., 2011), especially in economically less-developed countries. The failure affects both the employers and the employees, their dependents, government revenue (from nonpayment of taxes), shortage of raw materials which could affect the output and consequently employment and revenue generation of large firms. Evidence from Nigeria shows how instability in the business sector jiggled the overall country's output over the years. Recently, Nigeria witnessed a significant shift in its nominal GDP. The estimates in the second and third quarters of 2019 ranged from 9.9 to 8.01 per cent (CBN, 2019).

Human intelligence has been seen as a driving force for moving the global economy towards a sustainable business environment. As such, modern entities attached significance to human intellect (Orugun & Aduku, 2017). Business organizations will need human capital to facilitate the achievement of their objectives (Burhan et al., 2017; Khalik, Asbar, & Elihami, 2020). Achievement of organizational objectives depends on value creation. However, to create value, a deliberate measure of physical capital and intellectual potential has to be put in place (Siswanti & Sukoharsono,

2019). The value of any business is increased when intellectual employees are highly developed (Lentjushenkova, Zarina, & Titko, 2019). It is against this background that the study proposed a framework that integrates knowledge management and financial literacy to evaluate sustainability in SMEs.

2. Literature Review

2.1. Sustainability

Sustainability is an emerging research area and is attracting the attention of business entities, research community and regulatory bodies around the world, which has strengthened its implementation (Shad, Lai, Fatt, Klemeš, & Bokhari, 2019). The term according to the Bruntland Report of (1987) of the World Commission on Environment and Development refers to the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p.43; Yusliza et al., 2020; Reda, 2020). In attaining business sustainability, the ‘triple bottom line’ goals of economic, environmental and social effects have emphasized (Elkington, 1997). Meeting up with the TBL goals is a necessary condition for survival to any economy that has a passion for short and long term purpose (Sunday, 2017). Consequently, that will allow firms to gain sustainability in financial, natural and human spheres. It is therefore worthy to note that, sustainable business requires firms to take the long-term environmental, social and economic effects into account when formulating production and other policies (Tunn, Bocken, van den Hende, & Schoormans, 2019). Sustainability must therefore be taken into account to ensure that the future comes, and is not worse than the present (Januškaitė & Užienė, 2018).

2.2. Dimensions of Sustainability

Elkington's Triple Bottom Line (TBL) of 1997 has been broadly accepted and recognized in research and practice for a long time as the dimensions of sustainability (Svensson et al., 2018). The three-pillar model of social, environmental and economic sustainability has become common and is usually depicted by three crossing circles with sustainability at the middle (Purvis, Mao, & Robinson, 2019). We briefly highlighted these dimensions as follows:

Figure 1: Triple Bottom Line



Source: Adopted from Treiblmaier (2019).

2.2.1. Economic Dimension

The economic goal embraces economic viability and tackles economic needs (performance, improving energy efficiency) and budget for activities to induce sustainable development (De Matos Pedro, Leitão, & Alves, 2020). In the journey of sustainable business, many businesses failed, including SMEs. History has shown that firms in the Fortune 500 list had an average lifespan of 61 years in 1958, but by 1980 it had fallen to 25 years, and now it is 18 years. (Foster, 2012; Wilson, 2015). The triple bottom line asserts that organizations are in business to succeed economically, and their failure would throw them to the list of those that have vanished (Wilson, 2015). Economic sustainability comprises potential financial benefits, financial health, business performance, and trading opportunities of the company (Lopes, Scavarda, Hofmeister, Thomé, & Vaccaro, 2017).

2.2.2. Environmental Dimension

The environmental attention persisted during the past decades of the preceding century, though it concentrated much more on the enlarged definition of sustainability (Agrawal & Singh, 2019). The environmental priorities of businesses connected to the obligations assumed by firms for the impacts of their actions on their usage of available resources for productive activities and

consumption. The essence is to ensure that operations are sustainable without harming the immediate environment. The concept encompasses land, water and mineral resources (Lopes et al., 2017), and proposes to integrate environmental concerns into the strategy of the firm (Aleixo, Azeiteiro, & Leal, 2018; De Matos Pedro et al., 2020). Consequently, the incorporation of environmental concerns into managerial plans aims to change possible threats from the natural environment into competitive opportunities to enhance performance and gain a competitive edge (Agrawal & Singh, 2019).

2.2.3. Social Dimension

Social sustainability involves the peripheral economic effects of the firm's initiatives and its contribution to the enhancement of the environment at the community, national, and regional levels. It includes stakeholder participation, population, internal human resources and macro-social performance (Lopes et al., 2017). In a nutshell, the organization's efforts to promote the well-being of society is affected by the activities of the organization in one way or another (Tonial, Cassol, Selig, & Giugliani, 2019). Corporations alone, however, can not address the global sustainability issues and thus, social partners or stakeholders also have to be involved (Wilson, 2015). However, adequate information on how to integrate environmental and social issues into the main business of firms or how to address existing obstacles and enable businesses to adopt sustainability processes entirely remains a significant concern (Lopes et al., 2017).

2.3. Intellectual Capital

Researchers have described Intellectual Capital in various ways (Ozkan, Cakan, & Kayacan, 2017). Galbraith first used the term in 1969, defining it as an individual-owned intellectual contribution (Xu & Li, 2019). Marr and Schiuma (2001, p.43) defined the concept as "the group of knowledge assets that attributed to an organization and most significantly contributed to an improved competitive position of the organization by adding value to defined key stakeholders". It is the number of intangible assets of the company that adds value to the organization (Katemukda, Sudasna-na-Ayudhya, Comepa, & Kropsu-Vehkaper, 2018). The term is a multifaceted notion of practical capabilities, experience and knowledge to create value. Scholars have not yet agreed on the dimensions of Intellectual Capital (Ozkan et al., 2017). However, in this article, we proposed knowledge management and financial literacy indicators as proxies to Intellectual Capital.

2.3.1. Knowledge Management

Knowledge management is a systematic process to ensure that knowledge base of a business entity is fully exploited, including the skills, ideas, innovation and vision of potential employees to create more effective and reliable market practices (Geisler & Wickramasinghe, 2015). Effective use of the knowledge available within the firm creates a robust organizational culture, leading to the management of risks effectively (Yang, Ishtiaq, & Anwar, 2018). Consequently, it can be argued that there is a direct connection between organizational culture and success of SMEs and that their efficiency is higher if they integrate knowledge management into day to day activities (Lekan, Kayode, & Morenikeji, 2015). Organizations may use knowledge to apply their information to areas of human added value, such as vision, entrepreneurship, ideas and experiences (Allameh, 2018). It was argued that business experience and financial literacy are resources of knowledge which contribute to sustainable performance in SMEs (Hussain, Salia, & Karim, 2018; Kulathunga, Ye, Sharma, & Weerathunga, 2020).

2.3.2. Financial Literacy

Financial literacy has drawn more attention both from developed and emerging economies (Chepngetich, 2016). Households and SMEs now, however, need financial expertise in decision-making, as today's market and economy are more volatile and globalized than ever before. The idea of financial literacy includes understanding the significance of money and how to maximize the benefits of using money (Kadoya & Khan, 2020). According to Asenge, Anyebe, and Nomhwange (2016), Financial literacy is seen as an essential complement to the promotion of financial inclusion and, eventually, financial stability. Lack of literacy, especially on financial matters, contribute significantly to the failure of most SMEs in Africa, where the failure rate varies from 70 to 80 per cent out of every 100 enterprises due to lack of skills and access to finance (Aming'a & Moronge, 2018).

2.4. Sustainability in SMEs

The basis of SMEs is to function as a growth engine, create employment, promote sustainable economic development, create wealth, and develop entrepreneurial skills (Salleh et al., 2020; Eniola et al., 2015). SMEs are firms known to be significantly contributing to economic empowerment in the form of job creation, and social well-being of the most people in less developed economies,

especially those lacking access to formal employment in the public sector (Agyei, 2018; Salleh et al., 2013). According to the Nigerian Central Bank, SMEs are classified as companies with asset base varying from N5million to N500million (excluding buildings and land) and 10 to 300 employees (Gbandi & Amisah, 2014). Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) was created in 2003 to monitor and control of Micro, Small and Medium-Sized Enterprises (MSMEs) in Nigeria. Table 1 presents the categories of SMEs, according to SMEDAN (2015).

Table 1 - Definition of SMEs by SMEDAN

S/N	Size	Employment Level	Assets (₦ Million) Excluding buildings and land
1	Micro Enterprises	1 to < 9	1 to 10
2	Small Enterprises	10 to < 50	11 to < 100
3	Medium Enterprises	50 to 200	101 to < 1,000

Source: SMEDAN National Policy on MSMEs, 2015

Several studies have investigated the connection between Intellectual Capital, business performance and sustainability. Table 2 presents some of the studies identified to have addressed Intellectual Capital, especially as some relates to performance and sustainability in SMEs.

Table 2 - Review on Intellectual Capital

Author(s)/Year	Country	Findings
Orugun and Aduku (2017)	Nigeria	IC & org. performance: Positive
Sunday (2017)	Nigeria	IC & Sustainability: Positive
Omotayo and Omiunu (2019)	Nigeria	IC & SMEs performance: Insignificant
Ajike, Nnorom, and Egwuonwu (2016)	Nigeria	IC & Sustainability of SMEs: Significant
Mukherjee and Sen (2019)	India	IC & sustainable corporate growth: Positive
Ozkan et al. (2017)	Turkey	IC & financial performance: Positive
Xu and Li (2019)	China	IC & financial performance: Correlated
Demartini and Beretta (2019)	Italy	IC & SMEs corporate performance Positive
Januškaitė and Užienė (2018)	Lithuania	IC & sustainable competitiveness: Correlated
Tonial et al. (2019)	Brazil	IC & sustainable activities: Positive

Source: Compiled by the author, 2020

3. Methodology

The study is conceptual which systematically review the literature on Intellectual Capital and sustainability of SMEs. We focused on the sustainability of small and medium-scale enterprises in

Nigeria with a particular reference to the role of Intellectual Capital, proxied by knowledge management and financial literacy.

4. Discussion and Hypotheses Development

In the present age of the knowledge economy, the importance of IC is steadily increasing (Mukherjee & Sen, 2019). Drawing upon the Knowledge-Based View (KBV) of firms, this study examines how Intellectual Capital as proxied by knowledge management and financial literacy of SMEs influence their organizational sustainability. By using the KBV, top management argued to have a more significant influence on the path and success of knowledge management within the organization (Singh, Gupta, Busso & Kamboj, 2019). The KBV also can build employee engagement along with knowledge sharing and exchange within workers (Wang & Noe, 2010).

In trying to link Intellectual Capital with sustainability, Siswanti and Sukoharsono (2019) argued that intangible assets consisting of Intellectual Capital (social and human Capital) could improve the economic structure of a country and create sustainable development. Hence, Intellectual Capital identified as a factor that can impact and promote sustainability of firms (Ozkan et al., 2017).

4.1. Knowledge Management and Sustainability

Knowledge-Based View (KBV) theory originates from the Research-Based View (RBV), and the connection between knowledge management and sustainable SME was drawn from KBV theory. KBV theory proposes strategies for companies to gain competitive advantage by exploiting the ability of their knowledgeable staff to gain organizational results (Singh et al., 2019). Knowledge management (KM) is a process that involves an integrated approach for identifying, collecting, reviewing, retrieving and exchanging all of the organization's information assets including databases, documents and procedures (Nisar, Prabhakar, & Strakova, 2019). A set of collaborative human resource management activities can promote knowledge (Antunes & Pinheiro, 2020). Knowledge is, therefore, the company's strategically most valuable intangible assets. Accordingly, these assets are developed internally by the firm to developed employees' personal 'know-how' and 'learning-by-doing' (Nikolaou, 2019). Thus, we hypothesized that:

H₁: Knowledge management (KM) has a significant impact on SMEs sustainability (SUS).

4.2. Financial Literacy and Sustainability

Scholars relate financial knowledge to socialization, social learning and behaviour. However, both the socialization and social learning theories grew from social learning processes. According to social learning theory, social entities such as people learn by seeing the behaviours and activities of others (Kadoya & Khan, 2020). The role of banks and other financial institutions to the development of SMEs, lending to them remains a problematic and discouraging activity due to a lack of financial literacy and its impact on their sustainability, which impede their ability to pay as agreed (Lakmal, 2019).

The concept of financial literacy plays an integral role in instilling the financial knowledge needed to prepare budgets for household, develop savings plans and make critical decisions regarding investment. Krechovská (2015) stated that the origins of economic growth and sustainability lie in societal financial literacy. By contrast, low financial literacy leads to weak financial management practices and recurrent accounting errors. (Lusardi & Mitchell, 2014). Thus, we hypothesized that:

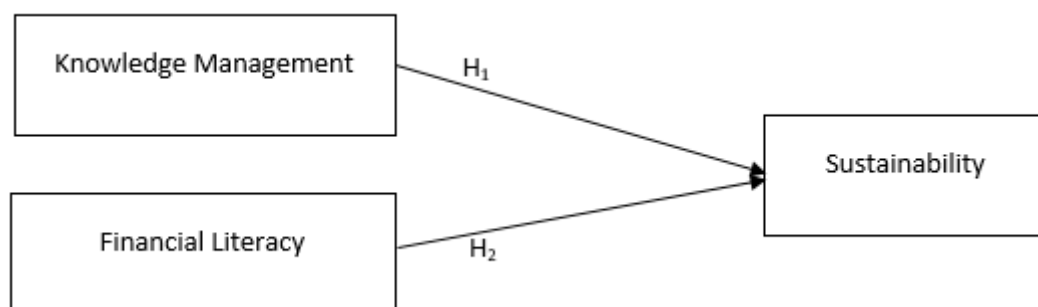
H₂: Financial literacy (FL) has a positive effect on SMEs sustainability (SUS)

4.3. Proposed Conceptual Framework

Figure 2 demonstrates the proposed conceptual framework for this study, according to the literature discussed above. The dependent variable for the study is sustainability and is measured by the triple bottom line (economic, environmental and social) goals. Furthermore, two indicators of human capital (which is a dimension of Intellectual Capital) were grouped as proxies, namely knowledge management and financial literacy.

Thus, we proposed the model below:

Figure 2 - Proposed Conceptual Framework



Source: Adapted from Tonial et al. (2019).

5. Conclusion

We have acknowledged in this article the considerable attention received by Intellectual Capital and its dimensions from researchers in recent years, and we have primarily seconded to this emphasis. The broad topic is sizable and relevant, and its deserving and sustained attention from multi-disciplines is timely. The paper conceptualizes a framework that assessed the influence of Intellectual Capital on the sustainability of SMEs in Nigeria. Review of previous studies on Intellectual Capital revealed how different dimensions and indicators such as human, structural and relational capital, institutions and governance, societal framework, technology and regional capital were used (Allameh, 2018; Cabrita, Cabrita, Matos, & Dueñas, 2015; Carillo, Rodriguez, & Martí, 2006). However, the proposed framework used sustainability as the explained variable, while Intellectual Capital (proxied by KM & FL) is the explanatory variable.

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