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Knowledge Sharing as a Value-Adding Initiative for South African SMME Sustainability: A Literature Review

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Knowledge management is deemed as an important tool for an array of firms across the globe to fortify their overall sustainability. In particular, the proper management of knowledge inside a firm should allow for better efficiency and effectiveness. One of the facets of knowledge management is that of knowledge sharing; better understood as the dissemination of knowledge (insight) to such an extent, and in such a manner, that it assists with the solving of problems and/or the creation of solutions within a firm. Albeit the aforementioned, is appears that small businesses (SMMEs) in South Africa do not make use of sound knowledge sharing initiatives as they have one of the worst sustainability rates in the world. Through the conduct of non-empirical research, this matter was theoretically investigated where it was found that the lack of knowledge sharing as a value-adding initiative within South African SMMEs is assumed to have a theoretically adverse influence on the effectiveness, efficiency and sustainability in these firms. Taking into account the findings, it was concluded that ultimately, the knowledge sharing initiatives in South African SMMEs are incomprehensive in their coverage to provide general guidance as to how these firms can share knowledge as to provide reasonable assurance surrounding their effectiveness, efficiency and sustainability in the foreseeable future. Moreover, relevant hypotheses were developed as avenues for further empirical research.

Keywords: *Knowledge sharing, sustainability, knowledge, management, SMMEs, South Africa*

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1. Introduction

As from the early 2000s, knowledge has been recognised as a significant resource in firms around the globe (Earl, 2001) which, in turn, spurred on the need for processes which can facilitate the creation, sharing and leveraging of knowledge (Becerra-Fernandez and Sabherwal, 2001; Ipe, 2003; Zieba et al., 2016). Knowledge can be viewed as the possession of information on information which can be leveraged to create *inter alia* a competitive advantage, enhanced innovation, improved creativity and greater authority (Pemberton and Stonehouse, 2000). In essence, if knowledge is effectively managed (i.e. created, shared, leveraged), it is highly likely to result in innovation (Brown and Duguid, 1991; Hinds et al., 2001; Mphahlele, 2010; Nejati et al., 2010; Aslani et al., 2012; Dube and Ngulube, 2012). Notwithstanding the above knowledge, among other (intangible) assets, is also of vital importance for any firm to become sustainable (Jackson et al., 2006; Nejati and Nejati, 2008; Antoncic and Omerzel, 2008; Du Plessis, 2011; Mohsam and Van Brakel, 2011). Sustainability pertains to a firm's ability to remain in operation, for an extended period of time, by means of achieving its relevant objectives. These objectives may include the execution of social responsibilities, environmental responsibilities and/or economic responsibilities (Pojasek, 2010; Goel, 2010; Alhaddi, 2015).

Fundamentally speaking, the management of knowledge in any firm is subjective in nature (Ipe, 2003). This is particularly the case since knowledge management (KM) is the intentional and methodical coordination of a firm's people/culture, processes and technology which is used to identify, select, organise, share and publish vital information in relation to firm activities which, in turn, may influence the execution of operations (Gupta et al., 2000; Geisler and Wickramasinghe, 2009; Zack et al., 2009; Nazari et al., 2016). Otherwise stated, KM has to do with an integrated approach to identify, capture, evaluate, retrieve and share all of a firm's information assets which can include databases, documents, policies, procedures and un-captured experience and expertise of individual employees (Koenig, 2012).

In most cases KM is very valuable for internal usage and mainly takes place at three levels: 1) individual level (individual employees), 2) group level (departments/units/teams/clusters), and 3) firm level (entire organisation) (Nonaka and Takeuchi, 1995; De Long and Fahey, 2000). KM can be used for internal purposes (employees, teams, units, etc.) or for external purposes (customers, suppliers, etc.) (Donate et al., 2017). Similarly, KS can also take place internally or externally. For this paper, emphasis was placed on the internal usage of KS initiatives. Using the above as a basis, it is not surprising that previous research studies show that the manner in which knowledge is managed in a firm will have a direct influence on its overall effectiveness (which refers to the extent to which a business' objectives are achieved (Business Dictionary, 2017a))., efficiency (which has to do with the time taken to complete tasks; the less time it takes to complete tasks, the more efficient a firm is perceived to be (Business Dictionary, 2017b), and sustainability (Ipe, 2003; Mohsam and Van Brakel, 2011; Robertson, 2016; Wang and Wang, 2016). In quintessence the influence of KM is ascribed to its girth nature – previous studies (Forte et al., 2016; Osman and Ngah, 2016; Romani, 2017) show that KM comprises knowledge acquisition, knowledge accumulation, knowledge creation, knowledge protection and that of knowledge sharing (KS).

KS refers to the process where relevant firm stakeholders mutually exchange implicit and explicit knowledge with the main intent to create new knowledge (Van Den Hooff and De Ridder, 2004; Paulin and Suneson, 2012) in order to provide/share insight, through suitable media, to assist and/or collaborate with stakeholders to *inter alia* solve problems, develop new ideas, or implement policies or procedures – to surmount adversity and necessitate a major transformation in firm culture (Pulakos et al., 2003; Cummings, 2004). According to previous research studies (Chen Huang, 2009; Chen Yang and Kiang Farn, 2009; Wang and Noe, 2010), KS may result in *inter alia* better business efficiency, better business effectiveness, improved inter-related trust, reduced costs, enhanced innovation, and better team performances (Inkpen and Tsang, 2005; Chen Huang, 2009; Chen Yang and Kiang Farn, 2009; Wang and Noe, 2010). Albeit the aforementioned, there are several influential factors which impact the overall influence of KS in a firm, *inter alia* time available to share knowledge, concerns about job security, differences in experience levels, differences in levels of competency, amount of interaction, communication styles, age-gaps, gender, staff morale, access to knowledge, level of trust, recognition, incentives and cultural differences (Awad and Ghaziri, 2004; Riege 2005; Hislop, 2005; Hong et al., 2011).

Using the above as a basis, it becomes apparent that although KS is of paramount importance to firms, it should also have a positive influence on Small, Medium and Micro Enterprises (SMMEs) in South Africa (SA). Unfortunately, previous studies (Wiese, 2014; Bruwer, 2016) show that South African SMMEs have one of the worst sustainability rates in the world as more than 70% of these business entities fail after being in existence for three years. Hence, this study was conducted to theoretically investigate whether KS initiatives have an influence on the overall sustainability of South African SMMEs.

For the remainder of this paper, discussion takes place under the following main headings: 1) research design and research methodology, 2) literature review, 3) conclusion, 4) managerial implications, 5) avenues for further studies.

2. Research Design and Methodology

Non-empirical research was conducted for this study, which fell within the interpretivistic research paradigm, with the main intent to develop theories pertaining to the influence of KS on the effectiveness, efficiency and sustainability of South African SMMEs. Specifically a thorough literature review was conducted whereby 86 sources were utilised to develop the respective theories (see Table 1).

Table 1. *Summary of literature sources used*

Source type	Quantity
Journal articles	61
Books	8
Theses/dissertations	5
Professional websites	5
Conference papers	4
Reports	2
Legislation pieces	1

The literature review conducted is evident in Section 3 below.

3. Literature Review

For this section, relevant discussion takes place under the following sub-headings: 1) overview of South African SMME effectiveness, efficiency and sustainability, 2) knowledge sharing as a component of knowledge management, 3) knowledge sharing in South African SMMEs.

3.1. Overview of South African SMME Effectiveness, Efficiency and Sustainability

In a South African dispensation, SMMEs are defined by the South African National Small Business Act No. 102 of 1996 as small, separate and distinct business entities, together with its branches and/or subsidiaries which are owned and/or managed by one or more owner(s), which conduct their respective business in any sector and/or sub-sector of the economy of South Africa (South Africa, 1996). Since the early-2000s, these business entities have progressively played a fundamental role in the stimulation of the national economy as they are responsible for employing approximately between 61% and 90% of the total national workforce, while also contributing up to 42% of the South African Gross Domestic Product (Africagrowth, 2010; Ladzani, 2010; Rankhumise, 2010; Booyens, 2011; Rankhumise and Tshabalala, 2011; Swart, 2010). When taking into consideration that no less than 90% of all operating South African business entities are regarded as SMMEs (Berry et al., 2002; Bell et al., 2004; Swart, 2010; Mouloungui, 2012; Amra et al., 2013; Chimucheka, 2014), clear tangent planes emerge as to why these business entities are deemed as the driving forces of economic growth in the country.

Albeit the above, South African SMMEs are known to have one of the worst sustainability rates in the world (Kabiawu, 2013; Wiese, 2014; Bruwer, 2016). This view is supported by previous research studies (Cant and Ligthelm, 2002; Van Eeden et al., 2003; SEDA, 2010; Adeniran and Johnston, 2011; Adcorp, 2012; Chimucheka, 2013; Adelakun, 2014; Mthabela, 2015), where it was found that these business entities have one of the highest failure rates in the world; up to 80% of South African SMMEs fail within their first five years of existence. This dispensation is often blamed on economic factors which relate to, *inter alia* government legislation, high interest rates, ineffective internal control, and negligence of management (Ahmad and Seet, 2009; Valdiserri and Wilson, 2010). These economic factors have a widespread effect on the economic environment, including the economic growth, of any country (Van Eeden et al., 2003; Radas and Božić, 2009; Jiang and Li, 2010; Herrington and Kew, 2013). The economic environment of a country refers to the state of a particular economy, taking into account its living conditions and socio-economic demographics (Guilhoto et al., 2002; Bruwer and Van Den Berg, 2017). Taking the above into consideration, it appears that the harsh economic environment and economic factors of South Africa adversely impinge on the overall sustainability of South African SMMEs. Consequently, South African SMMEs need to manage the harsh South African economic environment to the best of their abilities to remain sustainable (Bruwer, 2016).

Stemming from the above, the inference can be made that the sustainability of South African SMMEs leaves much to be desired mainly since up to 80% of these entities fail after being in existence for only five years. Considering that KS may have influence on the sustainability of any firm, it is highly probable that the sustainability of South African SMMEs is weak because 1) they do not use KS initiatives, or 2) they make improper use of KS initiatives.

3.2. Knowledge Sharing as a Component of Knowledge Management

Over the past few years, KM has been a trending current topic (Feser and Proeger, 2015). This is evidenced by the fact that more and more firms are seeing the value of knowledge; attempting to set up KM systems and practices to effectively use knowledge to fortify their overall sustainability, efficiency and effectiveness (Nonaka and Toyama, 1995; McAdam and Reid 2000; Ipe, 2003; Robbins and Judge, 2009; Islam et al., 2015; Robertson, 2016) – including both large firms and smaller business firms (Wong, 2005; Maldonado-Guzmán et al., 2016).

As previously mentioned, KM has to do with the structured coordination of a firm's people/culture, processes and technology. The main objective of KM is to ensure vital information (knowledge) is properly identified, selected, organised, shared and published to help a firm to perform its operations and achieve its objectives (Gupta et al., 2000; Geisler and Wickramasinghe, 2009). Specifically the latter comprises of an array of aspects *inter alia* knowledge acquisition, knowledge accumulation, knowledge creation and knowledge protection. Among the core aspects is that of KS.

KS can be formally defined as the mutual exchange of knowledge among relevant stakeholders, in a firm, through providing insight (through guidance, sharing ideas, giving advice, etc.) with the main intent to enlighten them to achieve their own objectives to, in turn, allow for the objectives of the firm to be achieved by solving problems and/or creating solutions (Schwartz, 2006; Janus-Hiekkarranta, 2009; Becerra-Fernandez and Sabherwal, 2010).

According to previous research studies (Gold et al., 2001; Ho, 2009; Mills and Smith, 2011; Hamidi et al., 2012), KS is strongly influenced by a firm's technology, structure (organigram) and culture, also known as the firm's infrastructure capabilities (depicted in Figure 1). In order to fortify the understanding surrounding these aspects, they are briefly explained below:

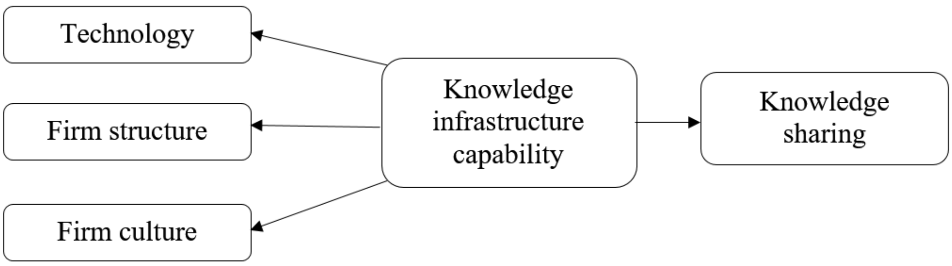

***Figure 1**. Influencers of knowledge sharing*
Source: Adapted from Mills and Smith (2011)

- <u>Firm technology</u>: This refers to a firm's information technology infrastructure which supports its information system needs, while simultaneously facilitating KM. It combines data processing, storage, and communication technologies, as well as systems (computers, databases, devices, information, servers etc.) and processes that make it functional (Becerra-Fernandez and Sabherwal, 2010). The existence of firm technology is a necessary for successful knowledge exchange (Karlsen and Gottschalk, 2004) as it enables and facilitates interaction among stakeholders for sharing knowledge and establishing a connected virtual environment for successful knowledge exchange by permitting knowledge seekers to identify and communicate with knowledge sources.
- <u>Firm structure</u>: This determines the manner and extent to which responsibilities, roles and power are delegated, controlled, and coordinated, and in what way information flows between management levels. The hierarchical structure of a firm defines each employee's role within the firm and significantly affects with which each individual employee predominantly and regularly interacts, and share knowledge. Reporting relationships in firms influence the flow of data and information in addition to the nature of groups who make collected decisions, and subsequently affect the creation and sharing of knowledge (Becerra-Fernandez and Sabherwal, 2010). Hence, a firm's structure defines how employees and firm

activities are arranged and directed toward the achievement of firm goals, and determines how information flows between various levels.

- Firm culture: Firm culture is concerned with the norms, values and beliefs that guide the behaviour of firm members (Almahamid et al., 2010). It has to do with understanding the importance of KM practices, managing support for KM at all levels, incentives that reward KS, provide encouragement for interaction for the creation and sharing of knowledge (Becerra-Fernandez and Sabherwal, 2010). Firm culture is heavily influenced by trust and teamwork (Park et al., 2004), which is why where two elements are considered as the most essential elements of "firm culture" which influence KS (Hamidi et al., 2012). According to Schein (2004), a firm's culture should be recognised as a key factor that can enhance the firm's effectiveness and sustainability. Consequently, it can be deduced that culture is a set of joint attributes, attitudes, beliefs, philosophies, practices, principles, rituals and values that are shared by employees in the pursuit of a firm's respective goals – providing its unique character.

Stemming from the above, it becomes apparent that the aforementioned three components will impact on KS in a firm. In fundamental nature, since if any one of these components is not present and/or conducive for employees to share knowledge in, it will adversely influence KS in a firm; evidently KM too. (Jasimuddin and Hasan, 2015; Tong et al., 2016). Ultimately, by having these three components in a firm, it may result in *inter alia* employee skill enhancement, the enhancement of employee productivity, and the efficiency of firm operations (Cong and Pandya 2003; Davenport, 2016; Natarajan and Bagwan, 2016).

3.3. Knowledge Management and Knowledge Sharing in South African SMMEs

During the 1990s, KM was introduced to developed countries for the first time only (Abidi, 2001; Kaniki and Mphahlele, 2002). During this timeframe, South Africa went through an intensive reorganisation that occurred because of political change which evidently launched its re-emergence in the global economy as a new democracy and an emerging knowledge economy (Thornhill and Van Dijk, 2003). Only from the early-2000s onward, large South African firms started to make use of KM, but only to a limited extent (Kruger and Johnson, 2010). According to research conducted by Gaffoor (2008), the use of KM had a positive influence on these firms' sustainability, efficiency and effectiveness, particularly in the sense that cultures of collaboration were cultivated, duplication of work was diminished, operational costs were minimised and service delivery improved.

After consulting an array of databases, it was found that limited literature existing on KM in South African SMMEs, with only two studies superficially making mention of individual KM measures used in these firms (Botha and Fouche, 2002; Botha 2004). It should however be noted that South Africa has past political history which is beyond the scope of this article, except for a few factors which are may have directly affected the adoption and utilisation of KM in South Africa. One such factor is the policy of affirmative action which according to Finestone and Snyman (2005) has the potential of empowering one group over the sanctioning of another. This action has an impact on job security and, consequently, leads to an unwillingness of workers to share their knowledge, in most cases. Another barrier to KM in South Africa is the question of language. In many cases, staff members are reluctant to share knowledge if they cannot understand ideas – having difficulty to convey their thoughts and insights (Prime, 1999).

Notwithstanding the aforementioned, in a South African SMME dispensation, many managers have started to become aware of the power of KS as a competitive necessity in recent times (Chan and Chow, 2008). This is specifically the case since more often than not, employees gain a wealth of knowledge while working at the firm and once they leave the firm (through retirement, transfer or leaving) their accumulated knowledge also leaves with them (Dodani and LaPorte, 2005). Unfortunately KS is not high on the priority of many South African SMMEs as a strategic competitive advantage (Mosham and Van Brakel, 2010). Stemming from the above, it becomes apparent that South African firms, particularly that of SMMEs do not make sound use of KS initiatives.

4. Conclusion

In a South African dispensation, SMMEs are regarded as the drivers of the national economy. Unfortunately these firms are believed to have one of the worst sustainability rates in the world. This latter phenomenon, according to prior research, is greatly spurred by an array of economic factors which, in turn, adversely influence the economic environment in which these firms operate. It is evident that despite South African SMMEs' key contribution to the national economy, approximately 75% (on average) of these firms fail after being in existence for only five years. Moreover, taking into account the socio-economic situation of

South Africa, many employees in South African firms are reluctant to share their knowledge to assure job security. The latter dispensation can however be overcome through the creation of a culture that inspires trust in firms, particularly that of SMMEs. Since KM approaches do not offer any reciprocal value to compensate for the time allocated for knowledge sharing, the views of management and/or employees are believed to view such initiatives as non-value adding in their respective firms.

4.1. Managerial Implications

The importance of KS, as a part of KM, was highlighted in this paper. In particular, since South African SMMEs make limited use of KS initiatives it becomes incumbent on managers to support the critical co-existence of both culture and trust in firm that support the willingness of employees to share knowledge with the intent to enhance the overall sustainability of their respective firms.

4.2. Avenues for Further Research

Taking into account the above, the following hypotheses were developed for further empirical testing:

H1: The sustainability of South African SMMEs is negatively influenced by their implemented KS initiatives.

H2: The sustainability of South African SMMEs is positively influenced by their implemented KS initiatives.

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