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Critical Innovation Skills Required of Sole Trader Small, Medium and Micro Enterprise (SMME) Management and Its Influence on Perceived Business Profitability: A South African Perspective

Juan-Pierré BRUWER[1*], Judith SMITH[2] and Suzaan LE ROUX[2]

[1]Business Re-Solution, South Africa
[2]Cape Peninsula University of Technology, South Africa

Small, Medium and Micro Enterprises (SMMEs) play a significant role in the stimulation of economies around the globe. In South Africa, though SMMEs add significant socio-economic value to the national economy, approximately 75 per cent of these business entities fail after being in existence for less than four years. Among the economic factors which have been highlighted to adversely affect the sustainability of these business entities is the lack of scarce skills – in particular, that of critical innovation skills. The objective of this study was to ascertain whether critical innovation skills had any statistically significant influence on the perceived profitability of South African SMMEs. Empirical research, exploratory research, and survey research were conducted in this quantitative research study whereby 387 responses were received from South African SMME management who had to adhere to relevant delineation criteria. Based on the results, the critical innovation skills of management of sampled South African SMMEs did not have any statistically significant influence on the perceived profitability of their respective business entities.

Keywords*: innovation, skills, critical innovation skills, profitability, SMMEs*

JEL Classification*: O31, J24*

1. Introduction

Across the globe Small, Medium and Micro Enterprises (SMMEs) are regarded as the "lifeblood" of international economies due to the socio-economic value they add (Chepurenko, 2010; Chimucheka, 2014; Agwa-Ejon and Mbohwa, 2015). In a South African dispensation, the foregoing is evident in local SMMEs'

[*] Corresponding Author:
Juan-Pierré Bruwer, Business Re-Solution, South Africa

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contribution of at least 34 per cent to the national Gross Domestic Product, and their employment of an estimated 61 per cent of the national workforce (Bruwer, 2016; Trading Economics, 2018). Notwithstanding the latter, including the fact that 90 per cent of all South African businesses in operation is regarded as SMMEs (Susman, 2017), these business entities have among the worst failure rates in the world. This view is supported by recent studies (Fatoki, 2014; Friedrich, 2016) where it was confirmed that approximately 75 per cent of South African SMMEs fails after being in operation for less than four years.

Over the years, an array of probable reasons have been suggested for this disconcerting dispensation, most of which relate to economic factors (Masama and Bruwer, 2018; Bruwer, 2018). One of the most prevailing economic factors that South Africa has been managing for more than two decades is a scarcity of critical skills (Cant et al., 2014). The scarcity of scarce skills stems from inter alia the HIV and AIDS pandemic, increased demand for skilled labour, a brain drain, and an under-investment in skills development initiatives by the national government (Brennan et al., 2004; Richardson, 2007; Domingos et al., 2014). Moreover, the system of Apartheid (between 1948 and 1994) disabled non-white residents from pursuing wealth and job creation – adversely impacting on the overall development of skills of these individuals (Mbinda and Spencer, 2016). It should, however, be noted that critical skills, though a shortage of them, can be learned and mastered (Kirschner et al., 1997; García-Magariño et al., 2009; Thorissón et al., 2014; Demetriou et al., 2016).

In a recent study (Bruwer and Smith, 2018), critical business skills were found to influence the overall attainment of key business objectives of South African SMMEs. A total of five of the 29 critical business skills tested in the foregoing paper are directly associated with critical innovation skills (defined as critical thinking, communication, collaboration, and creativity (Fiorillo, 2015)., namely: 1) communication skills, 2) decision-making skills, 3) entrepreneurial skills, 4) problem-solving skills, and 5) thinking skills. Apart from the study by Bruwer and Smith (2018), no research exists on whether these five critical business skills (hereafter referred to as critical innovation skills) have any influence on the attainment of key business objectives of South African SMMEs. For this reason, the following primary research objective was formulated in this study: To ascertain the extent to which critical innovation skills of management of South African SMMEs had a statistically significant influence on their business entities' perceived profitability. For the remainder of this study, discussions take place under the following headings: 2) conceptual framework, 3) research design, methodology, and methods, 4) results and discussion, and 5) conclusion.

2. Conceptual Framework

Taking into consideration that this study entailed the use of both principal axis factoring and linear regression analysis, this section serves as a foundation to conceptualise relevant terms with the main intent to allow for its fair measurement and management. The aspects conceptualised under this section are covered under the following headings: 1) profitability, and 2) critical innovation skills.

2.1. Profitability

Before the term "profitability" is explained, its relevance is grounded through means of one popular business theory. The Theory of the Firm suggests that any business operates with the main intent to remain in existence for the foreseeable future through means of maximising its profitability (Phillips, 1962). Over the years, this theory has been expanded on by scholars to take into consideration that an array of "forces" almost always influences the maximisation of profits (e.g., costs of products and/or services, quantity of transactions, supply and demand, and legislation) which need to be managed appropriately (Coase, 1988; Foss, 2000; Hu et al., 2007). Profitability alludes to a function of both internal- and external variables that are measured in a monitory sense that, in turn, shows the net effect of offsetting favourable economic benefits with unfavourable economic benefits (Alper and Anbar, 2011; Bruwer and Holtzhausen, 2014; Beck et al., 2016). Alternatively stated, profitability pertains to what extent income generated by a business is more substantial than expenses incurred by the same business.

2.2. Critical Innovation Skills

The term "innovation" is described as "the introduction of something new" or "a new idea, method or device" (Merriam-Webster, 2019). In turn, the term "skill" is regarded as an ability, attribute or area of expertise which can be measured in terms of its execution with the main intent to achieve a certain goal(s) (Kirschner et al., 1997; García-Magariño et al., 2009; Demetriou, et al., 2016). Hence, using the above as a basis, it becomes apparent that innovation skills pertain to those measurable attributes, abilities and/or areas of expertise to introduce a new idea, concept or method.

According to a previous study (Geisinger, 2016) innovation skills hold relevancy to inter alia creativity, problem-solving skills and communication skills. When the focus is shifted on the official list of scarce skills to the national economy (DHET, 2015), the skills which relate strongly to innovation skills are that of communication skills, decision-making skills, entrepreneurial skills, problem-solving skills and thinking skills. Based solely on the work of Bruwer and Smith (2018), these skills are conceptualised below.

***Table 1**. The conceptualisation of individual skills making up critical innovation skills*

Individual skills	Description
Communication skills	"Those skills that build trust and strong relationships between applicable stakeholders of a business entity through means of inter alia 1) active listening abilities, 2) proper non-verbal methods, and 3) proper verbal methods"
Decision-making skills	"Those skills involved in choosing between two or more courses of action towards possible solutions to a given problem."
Entrepreneurial skills	"Those skills which are used to create, organise and manage a business entity successfully."
Problem-solving skills	"Those skills that follow a process of finding solutions to difficult or complex issues related to a business entity."
Thinking skills	"Those skills that enable the mental processes to solve problems, make decisions, ask questions, construct plans and evaluate ideas, among other cognitive abilities."

Source: Bruwer and Smith (2018)

Stemming from the above the inference can, therefore, be made that critical innovation skills, within the ambit of this study, are those skills that are essential to the economic growth of a country. Since entrepreneurship, innovation and knowledge are interrelated, while also taking into account that any business is a vivid and clear reflection of its management, it becomes apparent that if members of management are innovative, their applicable business will also tend to be innovative (Gerber, 1995; Tidd and Bessant, 2018).

3. Research Design, Methodology and Methods

This study was empirical in nature and, due to limited research existing on the identified phenomenon (see Section 1) it was also regarded as exploratory research. Moreover, the study constituted survey research whereby a questionnaire was used to obtain responses from relevant respondents. The questionnaire comprised mostly closed-ended questions in the form of a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree), rendering this study to be quantitative in nature – falling predominantly within the positivistic research paradigm. Although the targeted population of this study was SMME management, each respondent had to adhere to the following delineation criteria to render his/her response as valid:

- Respondents had to have decision-making power in his/her respective SMME.
- Respondents had to be actively involved in their respective SMMEs' operations.
- Respondents had to have at least one year's managerial experience.
- Respondents had to be South African citizens.
- Respondents' SMMEs had to employ between one and 50 full-time employees.
- Respondents' SMMEs had to be regarded as sole traders.
- Respondents' SMMEs had to be regarded as non-franchised.
- Respondents' SMMEs had to operate in the Cape Metropole.
- Respondents' SMMEs had to exist for at least one year.
- Respondents' SMMEs had to be based in the fast-moving consumer goods industry.

With the above in mind, as the size of the targeted population was unknown, a non-probability sampling method was deployed, particularly that of purposive sampling – all with the intent to glean rich data. A total of 387 valid responses were received. Furthermore, relevant ethical considerations were taken into account which included: 1) protection from physical harm, 2) voluntary participation, 3) anonymity of respondents, 4) informed consent, and 5) confidentiality of information received.

4. Results and Discussion

Considering the identified primary research objective of this paper, relevant discussions in this section take place under the following headings: 1) descriptive statistics and 2) inferential statistics.

4.1. Descriptive Statistics

Taking into account the responses received from respondents, a summary of the descriptive statistics applicable to respondents and their sampled SMMEs is shown below.

Sampled SMMEs:

- 100% of sampled SMMEs were sole traders.
- 100% of sampled SMMEs were non-franchised.
- 100% of sampled SMMEs operated in the Cape Metropole.
- 100% of sampled SMMEs operated in the fast-moving consumer goods industry.
- 41.09% of sampled SMMEs existed between one and five years, 29.97% existed between six and ten years, while 28.94% existed for longer than ten years.
- 87.34% of sampled SMMEs employed between zero and five full-time employees, 8.27% employed between six and ten full-time employees, while 4.39% employed more than ten but less than 50 full-time employees.

Respondents:

- 100% of respondents had decision-making power in their SMMEs.
- 100% of respondents were actively involved with their SMMEs' operations.
- 100% of respondents were South African citizens.
- 37.98% of respondents were owners, 28.94% were managers, while 33.08% were owner-managers.
- 54.52% of respondents had between one- and five years' managerial experience, 29.91% had between six- and ten years' managerial experience, while 17.57% had more than ten years' managerial experience.
- 35.92% of respondents had a primary education qualification (they did not finish high school), 42.89% had a secondary education qualification (finished high school), while 21.19% had a tertiary education qualification (university).

Stemming from the above, the inference can be made that the average sampled SMME was a non-franchised sole trader who operated within the Cape Metropole, in the fast-moving consumer goods industry that has been in existence for 9.41 years (mean-score) while employing between zero and five full-time employees. In the same vein, the analogy can be made that the average respondent was a South African owner who was actively involved in his/her SMME's operations, who had decision-making power, and possessed a secondary education qualification with between one- and five years' managerial experience.

Apart from demographical aspects, respondents were asked to rate their agreement (5-point Likert scale) of the statement which read: "My SMME has more income than expenses" From the results, 0.52% of respondents strongly disagreed, 5.17% disagreed, 18.86% of the respondents were neutral, 58.15% agreed, and 17.3% strongly agreed. Otherwise stated, 75.45% of the respondents tended to agree with the statement, 18.86% were neutral towards the statement while the remaining 5.68% tended to disagree with the statement.

In terms of critical innovation skills, respondents were asked to rate their agreement on the statement which read: "In my SMME, management needs to have appropriately developed ..." A summary of the results is provided in Table 2 below.

Table 2. *Summary of respondents' agreement of relevance of having appropriately developed critical innovation skills*

Statement: "In my SMME, management needs to have appropriately developed ..."					
Skills	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
Communication skills	1.03%	1.03%	8.01%	39.28%	50.65%
Decision-making skills	2.07%	1.29%	8.53%	43.93%	44.19%
Entrepreneurial skills	4.65%	9.82%	19.64%	32.82%	33.07%
Problem-solving skills	3.88%	1.29%	11.37%	47.55%	35.92%
Thinking skills	0.78%	0.78%	7.75%	42.64%	48.06%

Source: Author's own source

Based on the results in Table 2, it is apparent that most respondents regarded critical innovation skills to be of importance when conducting their business. Mean-scores of 4.37 for communication skills further support this view (between "agree" and "strongly agree"), 4.27 for decision-making skills (between "agree" and "strongly agree"), 3.80 for entrepreneurial skills (between "neutral" and "agree"), 4.10 for problem-solving

skills (between "agree" and "strongly agree") and 4.36 for thinking skills (between "agree" and "strongly agree").

4.2. Inferential Statistics

To achieve the primary research objective of this study, principal axis factoring was first performed. This was done through means of exploratory factor analysis with the main intent to test whether a factor of "critical innovation skills (CIS)" could be used as a single factor, comprising of five items. For such a factor to be legitimate, it requires the following (Field, 2009; Cohen and Sayag, 2010), pp.

- Kaiser-Meyer-Olkin (KMO) value (a measurement of sampling adequacy) > 0.500.
- A Cronbach Alpha > 0.700.

From the results, the KMO value was 0.653 with individual factor loadings greater than 0.500 (see Annexure A), while the Cronbach Alpha value amounted to 0.630. Despite CIS encompassing five individual items, innovation skills could not be legitimately recognised as a factor. Regardless of the preceding, a Spearman Rank Correlation was performed to ascertain the influence of the five individual items on the perceived profitability of sampled South African SMMEs. A summary of the results is shown in Table 3.

***Table 3**. Summary of Spearman Rank Correlation results*

Correlations (N=387)		**Perceived profitability**
Communication skills	Correlation coefficient	0.118*
	Sig. (2 tailed)	0.02
Decision-making skills	Correlation coefficient	-0.018
	Sig. (2 tailed)	0.719
Entrepreneurial skills	Correlation coefficient	-0.034
	Sig. (2 tailed)	0.509
Problem-solving skills	Correlation coefficient	0.056
	Sig. (2 tailed)	0.275
Thinking skills	Correlation coefficient	0.008
	Sig. (2 tailed)	0.877

Source: Author's own source

From the results in Table 3 above, it is apparent that only one statistically significant relationship existed between communication skills and perceived profitability at the 5%-level. Otherwise stated, if the communication skills of management of sampled South African SMME improved, it would have a very weak positive influence on the perceived profitability of their relevant business entities. All remaining individual skills did not have any statistically significant influence on the perceived profitability of sampled South African SMMEs.

Despite the results above, the emphasis is continually being placed on the development of innovation skills (Hernandez et al., 2017). Though only communication skills (as part of innovation skills) were found to have a statistically significant influence on the perceived profitability of sampled South African SMMEs, it may be probable that:

- Innovation skills, at the moment, may not be as important in developing economies (e.g., South Africa) when compared to developed economies (e.g., United Arab Emirates).
- Currently, the actual innovation skills possessed by management of sampled South African SMMEs may be sufficient.
- Innovation skills are differently conceptualised around the globe, encompassing a different collection and/or combination of skills.

5. Conclusion

South African SMMEs are of importance to the national economy due to the socio-economic value they add. Unfortunately, a large proportion of these business entities fail after being in operation for less than four years. Among the factors which have a direct impact on the failure rate of South African SMMEs is a shortage of critical skills.

When taking into consideration that South Africa is a developing economy, it goes without saying that innovation is a necessity for its overall development. Stemming from the results of the study it, however,

appears that innovation skills of management of sampled South African SMMEs (as conceptualised in Section 2) may already be sufficiently developed as only one of the five individual skills making up innovation skills had a statistically significant influence on the perceived profitability of these business entities. Avenues for further research include, but are not limited to:

- The influence of innovation skills of SMME management on business solvency in South Africa.
- The influence of innovation skills of SMME management on business liquidity in South Africa.
- The influence of innovation skills of SMME management on business sustainability in South Africa.
- The influence of innovation skills of SMME management on business profitability in developed economies (e.g., United Arab Emirates).
- The influence of innovation skills of SMME management on business solvency in developed economies.
- The influence of innovation skills of SMME management on business liquidity in developed economies.
- The influence of innovation skills of SMME management on business sustainability in developed economies.

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