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To cite this article: Dubihlela, J., Chakabva, O., & Tengeh, R. (2021). A risk management framework for fast moving consumer goods retailers in South Africa. *Focus on Research in Contemporary Economics (FORCE), 2*(1), 4-40.

To link to this article: <u>https://www.forcejournal.org/index.php/force/article/view/21</u>



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Published online: 27 May 2021.

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RESEARCH ARTICLE

A RISK MANAGEMENT FRAMEWORK FOR FAST MOVING CONSUMER GOODS RETAILERS IN SOUTH AFRICA

Job Dubihlela*, Oscar Chakabva, & Robertson Tengeh

ABSTRACT

This paper investigated the risk management practices of FMCG SMEs in the Cape Metropolitan Area in an attempt to fill the knowledge gap on risk management and sustainability of SMEs. This study used a mixed methods approach. The data from 320 SME owners and managers operating in the FMCG sector of the Cape Metropolitan Area were collected through a standard questionnaire. In order to validate the quantitative data gathered through a questionnaire-tool, qualitative data were collected by interviewing two risk experts. The findings revealed that FMCG SMEs have risk management mechanisms in place, but they are too simplistic and very informal. Even so, it was noted major that SMEs that existed for ten or fewer years tend to lack the crucial elements of a useful risk management tool kit as dictated by best practice. Aligned to this was the lack of budgetary control and contingency fund account in SMEs, lack of risk knowledge, and so forth. As such, this paper proposes a practical risk management frame that is aligned with the needs of FMCGs. The framework presented in this article is anticipated to serve as a practical risk management tool for use by SMEs since it was informed by the empirical results and best practice, as documented in the literature. This paper contributes to the risk management literature in the FMCG SME sector. In addition, this is a pioneering empirical study to investigate the existence of the crucial elements of a useful risk management tool kit in FMCG SMEs, as dictated by best practice.

KEY WORDS: Risks, Risk Management, FMCG SMEs, Framework, Sustainability, South Africa

*Correspondence concerning this article should be addressed to Job Dubihlela, Department of Internal Auditing and Financial Information Systems, Cape Peninsula University of Technology, Cape Town. E-mail: <u>dubihlelaj@cput.ac.za</u>

1. INTRODUCTION

The high failure rate of small and medium enterprises (SMEs) is a global problem, and recent studies have shown that the failure rate ranges from 70% to 90%, depending on a country and industry (Kaminskaite, 2017:3). According

to the Organisation for Economic Cooperation and Development (OECD) (2017), the number of SMEs in Japan dropped by 21% between the years 1999 and 2014, while the average death rate for SMEs in United Kingdom (UK) stood at 9% during the year 2015 (Rhodes, 2016:9). Also, about 50% of SMEs in the United States of America (USA) fail within 5years (Dubihlela & Nqala 2017).

SMEs in Africa are also being bedeviled by many factors militating against their performance, which results in a high SME failure rate. The failure rate of SMEs in Africa is relatively higher, with 50% of the new SMEs failing within the first 3years while 95% fail within the first 4years (Mungal & Garbharran, 2014:77). For example, 60% of SMEs in Zimbabwe fail within their first year of operating, 25% fail within their first 3years, and the remaining 15% are likely to continue to exist (Nyamwanza, Paketh, Makaza & Moyo, 2016:305). Furthermore, the rate of failure of SMEs in Uganda is alarming, with one-third of new SMEs not going beyond their first year of operation.

In South Africa, the government has called upon several organizations to support SMEs through various initiatives like subsidized credit programs and loan guarantees. Organizations are helping SMEs include among other, the Nations Trust and Micro Enterprises which provides loans of a maximum of R20 000 to black South Africans between the ages of 18 and 35, and the Small Enterprise Finance Agency (SEFA) which provides financial support to owner-managed enterprises to promote their survival and growth (Khan, 2014). Despite the direct and indirect government support, SMEs are still struggling to survive. Thus, the percentage of South African SMEs which fail within the first five years ranges between 50% and 95% (Mong, 2012:33-34), and nearly 75% of new SMEs fail to become established enterprises, which has been regarded as one of the highest failure rates in the world (Yeboah, 2015:4). As a result, South Africa is losing millions of rands and job opportunities due to the high failure rate of SMEs (GEM, 2011).

Many studies have examined the perceived reasons why SMEs fail to achieve continued existence (Islam & Tedford, 2012:3; Pyeman, Rashid, Hanif, Mohamad & Tan, 2015:247; Kaminskaite, 2017:11; Smit & Watkins 2012:6325).

Based on these studies, one chronic factor which was pointed continuously out as probably the most significant reason why SMEs fail to achieve survival is the accumulation of risks due to lack of appropriate management skills, including risk management skills. To test these perceptions, this paper seeks to investigate the risk management practices of SMEs which sell fast-moving consumer goods in the Cape Metropolitan Area in order to determine if they are better positioned to manage risks or not.

Preceding the first section in this paper, the introduction, a literature review of risk management in general as well as the risk management practices in SMEs is provided. Next, the methodology, results and discussion, conclusions and then limitations of the study are provided in this paper.

2. LITERATURE REVIEW

While risk management within the FMCG SME industry is the central theme of this paper, the scope of the literature review in the following sections is expanded to embrace a generic discussion of the risk management in SMEs, due to the absence of literature specific to FMCG SMEs.

2.1. Risk management

The on-going evolution of technology is fuelling the persistent transformation of the business landscape, i.e., substitute products are now developed faster, competition is becoming stiff worldwide, and operations are becoming significantly more complex (Juliff, Kado, & Barta, 2013:20). In this volatile business environment, risk management is a critical factor that can enhance the chances of sustained and successful business longevity (Dubihlela & Gwaka, 2020). It is, therefore, undoubtedly that any business enterprise must develop and implement sound risk management practices. There are various acknowledged definitions of risk management in use. Some scholars view risk management as a decision-making process without the identification and evaluation of risk. In contrast, others see it as a complete process, including identification, evaluation, mitigating, and monitoring of risk (Berg, 2010:81). In general terms, risk management refers to a system of evaluating, reducing, and avoiding unintentional loss to an entity, by making use of insurance and safety measures (Dictionary.com, 2019). In core, risk management entails identifying, evaluating, prioritizing, mitigating, and monitoring of risks (Berg, 2010:80). It may be noted that the main objective of risk management is not to prohibit taking a risk but to minimize risks up to a tolerable level for an enterprise (Abrams, Von

Kanel, Muller, Pfitzmann & Ruschka-Taylor, 2007:222; Dubihlela & Gwaka, 2020). In this case, risk tolerance demarcates the margins of the risk-taking outside of which the business is not prepared to venture (Smit, 2012:266). Other objectives of risk management differ among business since businesses vary in size and level of complexity (Andersen, 2006:31). Some more generic goals of risk management noted by Verbano and Venturini (2013:188); Abrams et al., (2007:222); Dubihlela and Gwaka (2020:59) include:

- **Create business value:** To increase business profits by reducing costs and ultimately to allow the business to achieve its mission.
- **Minimize risks up to a tolerable level:** Risk tolerance demarcates the margins of the risk-taking outside of which the business is not prepared to venture.
- Manage risk environment: To reduce the likelihood and possible impact of potential losses, and to ensure sufficient financial protection against potential losses.
- Promote risk awareness: Through the risk identification step, risk management creates awareness of the possible threats that may prevent the business from achieving its objectives.

2.1. 1. Risk management process

The previous section has revealed several benefits that may stem from making fair use of risk management initiatives ranging from monetary to non-monetary benefits. To ensure that businesses reap maximum benefits from risk management, frameworks have been developed to establish the processes of risk management (Sunjka & Emwanu, 2015:1474). These frameworks include, but not limited to, Operational Risk Management, Corporate Governance, and Enterprise Risk Management, which were proposed by previous researchers to depict specific steps that combine to form the risk management process. However, these frameworks differ in the exact composition of the components of the risk management process. Despite such variation, there are universally acknowledged steps that are usually considered in this process to deliver a simple and effective risk management process (Young, 2006:31). These are schematically depicted in Figure 1.



Figure 1: Risk management process (Source: Kagwathi, Kamau, Njau & Kamau, 2014:3-4)

2.1.1.1. Risk identification

Risk identification is the initial step of the risk management process, which involves identifying and documenting the business's key risks (Kavaler & Spiegel, 2003:4). The objective of identifying and documenting risks is to create awareness of the future uncertainties to enable these events to be managed most efficiently and proactively (Hallikas, Karvonen, Pulkkinen, Virolainen & Tuominen, 2004:52). To manage risks efficiently and proactively, there should be a rigorous and continuous process of risk identification that also consists of mechanisms to identify new and emerging risks timeously (Shenkir & Walker, 2007:4). Identifying new and emerging risks should start by understanding the business objectives, both implicit and explicit. Once the objectives have been defined, risks that may prevent the business from achieving those objectives will then be identified from both internal and external factors (Tsiouras, 2015).

Internal factors include infrastructure (capital access, raw 'materials' availability), human (loss of key staff, fraud), operational (machine or tool breakdown, systems failure), health and safety (work-related accidents and injuries) managerial and leadership (governance risk, reputation risks), etc. (Pojasek, 2013:84). On the other hand, external factors include economic factors (interest rates, exchange rates), environmental factors (natural resources), social factors (customer behavior, demographics), etc. (Pojasek, 2013:84). Tools used to identify risks from these factors could include the use of flowcharts, physical inspections, brainstorming and many others (Shenkir & Walker, 2007:4). The selection of an appropriate tool is influenced by the nature of the factors under evaluation, types of risks, the business context, and the objective of the risk management exercise (Dinu, 2012:69). For instance, where less time and funds are available for risk identification and analysis, a checklist and judgments based on experience may be used.

Once possible risks have been identified from internal and external factors using the preceding tools, it is of paramount importance to have a template for recording relevant information concerning each risk (AIRMIC, Alarm, and IRM,

2010:5). AIRMIC, Alarm, and IRM (2010:5) point out that the primary purpose of a template is to provide a detailed description of risks in a table, risk register, spreadsheet, or a computer-based system in order to promote a comprehensive risk assessment process. There is no particular blueprint for the layout of the template for recording risks register, and every business has a high degree of flexibility concerning how it lays out its templates (AIRMIC, Alarm, and IRM, 2010:5). Table 2.6 depicts a collection of information that could be recorded for each risk.

ITEM		EXPLANATION/EXAMPLE
1.	Name or title of risk	Unique identifier or risk index
2.	Risk category	Economic, operational, strategic, environmental, etc.
3.	Cause of risk	How and why the risk could happen
4.	Impact on business	The qualitative and/or quantitative cost should the risk materialize
5.	Loss of experience	Previous incidents and prior loss experience of events related to the risk
6.	Risk appetite	Whether the risk is acceptable or whether it needs to be treated
7.	Risk controls	The existing internal controls that may minimize the likelihood of the risk occurring
8.	Risk rating	A risk level rating based on pre- established criteria, e.g., high, medium or low
9.	Risk owner	A person accountable for risk treatment and monitoring

Table 1: Detailed risk description

Source: AIRMIC, Alarm, & IRM (2010:5)

Once the risks have been identified and documented, an evaluation of whether the risk is acceptable or whether it has to be mitigated needs to be performed. This will be achieved in the next step.

2.1.1.2. Risk evaluation

As shown in Figure 1, risk evaluation is the second step of the risk management process. As noted by Braendeland and Stolen (2004:156), it involves the determination of the magnitude of risk and prioritizing risks. Essentially, this step is into two efforts; determining the extent of risks and prioritizing risks (Braendeland & Stolen, 2004:156). The magnitude mainly refers to the level of possible consequences (degree of impact) and the likelihood (level of probability) associated with the risk occurrence (KarimiAzari, Mousavi, Mousavi & Hosseini, 2011). Basically, the higher the likelihood of a "worse" effect taking place, the greater the level of risk. Determining the magnitude of risks usually involves using quantitative techniques or qualitative techniques, or even a hybrid of both0020(Choudhry & Iqbal, 2012).

Qualitative techniques use descriptive words to categorize and document the impact and probability of risk, e.g., words such as high-impact and low-probability (Cox, Babayev & Huber, 2005:651). First, the risk team must determine the scoring scale. The most widely utilized qualitative scoring techniques use a 5-point scale for impact and a scale of 1% to 99% for probability (COSO, 2004:4). Each risk is allocated a priority category according to the perceived level of risk. For example, if the risk team decides on using 3-point, then 3 may mean a high impact, 2 may indicate a medium effect, and 1 may mean a low impact. Using the same ordinal ranking system, a score of 1 could mean low probability which may represent probabilities from 1% to 33%, 2 could mean medium probability which may represent probabilities from 34% to 66%, and 3 could mean high probability which may represent probabilities from 67% to 99%. Then when evaluating the impact and likelihood, the risk team may look at the risk and decide that it has a high impact and high likelihood; as a result, it receives a score of 3 for the impact and probability. Qualitative risk evaluation is subjective, as it is performed by individuals participating in the risk evaluation based on their experience and personal perceptions of the risk impact and probability (Bahamid & Doh, 2017:4)

Unlike qualitative risk evaluation that assigns each risk into a high, medium, or low category, the quantitative risk evaluation calculates a numeric financial impact on a business, in case a risk occurs, and its probability as a percentage (Ramona, 2011:1108). For example, it may quantify the impact in terms of cost, number of injuries or accidents, number of machine breakdowns, etc. Qualitative and quantitative risk evaluation techniques complement one another and are best used collaboratively, one after the other (Svensson, 2017:11). Ideally, qualitative risk evaluation should be conducted before the quantitative one as this will allow the risk team to focus the quantitative risk evaluation on the risks with the highest probabilities and impacts.

Risks are not of tantamount importance to a business, and as such, there is a need to prioritize risks in order to determine significant risks that require ' 'management's close attention (Bartlett, 2004:101). Therefore, the results of the qualitative and quantitative risk evaluation will then be used to rank risks according to their level of impact and probability. For example, if the impact has been assigned scores as follows: 1 = Minor, 2 = Moderate, 3 = Severe, 4 = Very Severe, and 5 Extreme (Department of Environmental Affairs and Tourism (DEAT, 2006). While probability has been assigned scores as follows: 1 = Very unlikely, 2 = Unlikely, 3 = Likely, 4 = Very likely, 5 = Almost certain (DEAT, 2006). These values will then be imported into the risk formula (impact multiplied by probability), and the calculated answers become risk ratings. These risk ratings can be represented in a risk matrix format, as shown in Table 2.

Table 2: An example of a risk matrix

	5	5	10	15	20	25
	Extreme					
	4	4	8	12	16	20
	Very Severe					
	3	3	6	9	12	15
t	Severe					
mpact	2	2	4	6	8	10
m	Moderate					

1 Minor	1	2	3	4	5
Value level descriptor	1 Very unlikely	2 Unlikely	3 Likely	4 Very Likely	5 Almost certain
	Probability				

Legend

-		Extremely high risk		
		Very high risk		
		High risk		
		Medium risk		
		Low risk		
~	DEAT (2006)			

Source: DEAT (2006)

From Table 2, risks falling between the ranges of 1 to 4 have very unlikely to the very likely probability of happening and a minor to very severe impact on the business and therefore are ranked as low risks. Risks falling between the ranges of 5 to 10 have a very unlikely to the almost certain probability of happening and a minor to extreme impact on the business and therefore are ranked as medium risks. Risks falling between the ranges of 12 to 16 have a likely to the almost certain probability of happening and a severe to extreme impact on the business and therefore are ranked as high risks. Risks with a risk rating of 20 have a very likely to the almost certain probability of happening and a very severe to extreme impact on the business and therefore are ranked as high risks. Risks with a risk rating of 20 have a very likely to the almost certain probability of happening and a very severe to extreme impact on the business and therefore are ranked as not herefore are ranked as very high risks. Then risks with a risk rating of 25 have an almost certain probability of happening and an extreme impact on the business and therefore are ranked as severe high risks.

2.1.1.3. Risk mitigation

The results of identifying, evaluating, and prioritizing risks can then be used to develop strategies to manage risks during the risk mitigation stage. Thus, the management will come up with strategies to prevent the risk from occurring or minimize the effect should the risk occur (Smit, 2012:283). Zsidisin and Ritchie (2009:93) mention that principle management strategies addressing risks may include acceptance, avoidance, mitigation, and transfer.

In a risk avoidance strategy, the risk team strives to get rid of the risk entirely from its effects on the business, in instances where the risk might change the business objective (Bahamid & Doh, 2017:5). Typically this means that the company opts not to embark on an activity associated with a particular risk. In risk transfer strategy, the risk team shifts the accountability of a possible threat to a third party, e.g., an insurance company (Wang & Chou, 2003). In risk mitigation strategy, the risk team attempts to lessen the probability of a risk event from happening by using an appropriate action plan and resources, e.g., putting in place internal controls (Bahamid & Doh, 2017:5). However, when risks cannot be avoided, transferred, or mitigated, the team risk adopts a risk acceptance strategy; in this case, it takes no action (Goh & Abdul-Rahman, 2013:22). Usually, the risk team will choose to accept those risks that are of low impact to the business.

When positive risks or opportunities occur or are anticipated, exploit and enhance are typical strategies that are likely to be applied in response. The exploit strategy is applied when the risk team takes advantage of an opportunity if it materializes (Banham, 2004:68). Then enhance strategy is used when the risk team anticipates an opportunity and increases the probability of its occurrence through the allocation of appropriate action plans and resources (Smit, 2012:279).

2.1.1.4. Risk monitoring

Risk monitoring, as the final step, involves checking risk plans regularly to ensure their execution and effectiveness in reducing risk. Berwick (2007:22) emphasizes that risk plans should be frequently reviewed to see if they are achieving intended results, which is ensuring effective risk management. The best risk monitoring practices provided by the Project Management Institute (2016) are as follows:

Reserve analysis: This involves a comparison of the contingency reserves to the
residual risk to determine if there is still sufficient buffer in the pool. In this case,
contingency reserves refer to time, cash, or other resources set aside to manage
risks that arise with time. These risks could be foreseen, like those recorded on a
risk register. In contract, they could be unforeseen, such as new risks arising from
risk monitoring. Contingency reserves get depleted over with time, as new risks

emerge, and reserves are used to mitigate them. Therefore, monitoring the level of reserves is a necessary task as it ensures that the reserve in the pool remains adequate to cover the remaining risks.

- Risk Audit: It is a process of examining and documenting the effectiveness of procedures and controls in managing risks and their impacts on the budget. Risk audits could be planned or could be triggered when thresholds are exceeded. Risk audits are usually executed by risk auditors, who have specific know-how in risk evaluation and auditing techniques. To achieve objectivity, risk auditors typically are not part of the risk team. Some businesses prefer to hire independent contractors to perform risk audits.
- Risk reassessment: Re-assessing risks make it possible for the risk team or risk
 owners to evaluate whether the risk probability, impact, or priority ratings are
 changing; new risks are emerging; old risks have vanished; and if risk strategies
 are still adequate. If a risk's probability, impact, or priority ratings have changed, or
 if new risks have emerged, the risk team may repeat the risk evaluation process to
 determine the risk's effects on the business.
- Status meetings: Status meetings present a platform for risk owners to share their experiences and inform each other on their risk status and plans. Such collaborative discussions enable risk owners to bring to light risks that are emerging, whether or not planned risk strategies are working, and areas where additional resources are needed.
- Variance and trend analysis: Variance analysis evaluates the discrepancy between the planned and the actual results in order to find out any unacceptable risks to the business. Trend analysis entails observing the business performance over time to establish if performance is getting better or worse.

From the analysis of various risk monitoring techniques, it is clear that during the risk monitoring step, old risks are tracked, residual risks are observed, and new threats are identified. These outputs are used to update the risk register and other

risk documents for the benefit of future risk owners.

2.2. Risk management practices in SMEs

A systematic approach to identify and evaluate risks along with mechanisms to minimize them are critical to guarantee a ' 'business's survival and create sustainable value. This holds particularly for SMEs as they are highly exposed to multiple risks, as a result of limited resources (Verbano & Venturini, 2013:186). To mitigate the risks aroused out of various reasons, here in this paper, it is found that by deploying risk management systems, SME owner-managers can easily save their businesses or at least lessen their losses. In this connection, this section explores past research and existing literature related to the risk management practices in SMEs to determine if risks are adequately and effectively managed:

2.2.1. Building of relationships

As Sunjka and Emwanu (2015:1482) pointed out in their study of four SMEs that have been trading for more than 20 years, building a good working relationship with staff, banks, suppliers, and customers is a central risk management practice. The study further clarifies that these relationships stimulate trust, offer mutual benefits, and eventually contribute to risk mitigation. This is echoed in a large-scale study by Kim and Vonortas (2014), which showed that building relationships is a frequently used risk mitigation strategy in SMEs and according to their findings, mostly for coping with human resources, financial and market risks.

2.2.2. Insurance

This involves paying premiums to an insurance firm so that when a risk occurs, the insurance firm will take the business to its original position (Kagwathi et al., 2014:3-4). Dubihlela and Nqala (2017) described running an enterprise with basic insurance as a smart way of managing identifying risks and reducing uncertainty. About 58.2% of the selected Western Cape SMEs in survey research by Smit (2012:236) indicated that insurance is their primary tool for managing risks identified in financial, operational, and marketing areas. However, a survey of 1,000 registered Australian SMEs by the Insurance Council of Australia (2008) exposed that sole proprietors have the most significant rate of non-insurance, with 40.0% running their businesses without general insurance. The study further discloses that 80% of the owners who bought insurance were under-insured. A possible explanation for this, according to Smit and Watkin (2012), is that many SMEs regard insurance as a rip-off.

2.2.3. Diversification

This involves selling a variety of products or services as a strategy for risk management. To some extent, owners and managers of SMEs adopt diversification strategy (Kagwathi et al., 2014:3-4); however, this strategy could be more effective if these entrepreneurs were skilled at choosing the suitable business combinations in their portfolios (Kamau & Njau, 2011).

2.2.4. Risk avoidance

The qualitative study by Boubala (2010:72) of 150 ' 'SME's within the Cape Metropolitan area showed that most of the respondents do not know how to determine their business risk appetite. Thus, ICAEW (2005) reasoned that SMEs risk management techniques are primarily limited to risk avoidance actions. In line with this notion, a study by Smit and Watkins (2012) concludes that SMEs owner-managers prefer to avoid risks instead of devising risk control methods. This hinders the economic progress of a nation since every enterprise can be defined by its capacity to take on more significant risks (Kagwathi et al., 2014:3).

Despite the fact that the risks and mitigation measures deployed by SMEs mentioned earlier, scholars and practitioners alike raised questions about their effectiveness since the rise of SMEs. This emanates partly from the fact that the management of risks in SMEs resides with the entrepreneur's evaluation of adverse events and opportunities concerning his or her business (Watt, 2007). Yet, these SME entrepreneurs have a generally low level of managerial skills (Kaminskaite, 2017:11). As such, a structured approach to risk management would not be high up on their agenda (Naude & Chiweshe, 2017:1).

2.3. Factors inhibiting effective risk management in SMEs

In the previous section, it was confirmed that SME owner-managers have risk mitigation measures in place. While most SMEs adopt risk mitigation measures, the section further revealed that these measures are not adequately and productively employed. Several studies found numerous examples of SMEs that take an unstructured approach to risk management (Gao, Sung & Zhang, 2013; Sukumar, Edgar & Grant, 2011; Poba-Nzaou et al., 2014). The findings established that the implementation of risk management in SMEs is influenced by financial constraints, lack of technology, and lack of knowledge.

According to Aureli and Salvatori (2013:23), astringent risk management system requires sufficient financial resources. For example, cash is needed to hire risk experts to support the implementation of effective risk management. However, SMEs are faced with funds mobilization constraints (Yang, Chen, Gu & Fujita, 2019:1). Their financial exclusion is a major hampering factor because lending to these enterprises is considered inherently risky as they lack collateral security (Booyens, 2011; FinScope, 2010). Still, Berger and Udell (2006) highlighted that the transactional income of SMEs does not sufficiently meet their financial requirements. As a result, Aureli and Salvatori (2013:30) noted that SMEs have little or no financial resources to invest in risk management activities.

Related risk tools and technologies like the ERM software help management visually depict, size, assess, and address risk concerns""" (Patterson, 2015). However, most of the SME entrepreneurs are unaware of technology, and if they know, it is often unaffordable to them (Farsi & Toghraee, 2014). The main obstacles to technology development within the SME sector are elaborated by Farsi and Toghraee (2014) as follows: (1) a shortage of funds; (2) the process of allocation of loans is very lengthy and expensive to SMEs; (3) the low profitability of SMEs, which restrains investment in technology modernization; and (4) lack of knowledge of entrepreneurs regarding the importance of technology. The absence of technology within SMEs has made it difficult for these enterprises to attain effective risk management.

Furthermore, proper risk management practices require vigilant management attention, a high level of professionalism and knowledge (Aureli & Salvatori, 2013:23). However, SMEs are often sole proprietorship and partnerships which are characterized by poor employee education, lack of professionalism, and over-dependence on one or two key people (Zivanai, Onias, Lloyd, Felix & Chalton, 2014:195). As a result, SMEs owner-managers may face difficulty in identifying and evaluating emerging risks resulting in under-treatment of risks (Financial Management Branch of Queensland Treasury, 2011:56), hence, the need to put forward measures to assist SMEs to deal with lack of knowledge and other factors inhibiting effective risk management within their businesses.

3. METHODOLOGY

A mixed methods approach that facilitated the utilization of a questionnaire and an interview guide as instruments within the quantitative and qualitative research paradigms was employed for data collection. The qualitative method helped to authenticate the quantitative one.

3.1. Population and sampling

The population of interest for this study consisted of every FMCG SME, which was operating in the Cape Metropole at the time of the research. The sampling frame was limited to operating in the FMCG sector of the Cape Metropole, South Africa, FMCG SMEs were selected since they are regarded as the most vital enterprises in the SME industry due to the nature of their products (basic and short-lived) (Singh, 2014).

In order to make sure that participants with adequate and appropriate work experience in the field of risk management were chosen during the sampling procedure, the target population was limited to managers and owners of FMCG SMEs operating in the Cape Metropolitan area. Managers and owners were selected because they are regarded as the decision-makers in their enterprises and thus, they are likely to be aware of the risk management practices put in place in their businesses. In the absence of a complete list of all FMCG SMEs operating in the Cape Metropolitan area, the purposive sampling method was used to identify the 320 FMCG SMEs that participated in the quantitative component of this research.

LinkedIn was used as a method for recruiting participants for personal interviews. This approach relied on individuals self-identifying themselves as risk consultants or something similar. In this case, LinkedIn was helpful as it returned 5174 results, which we compiled into a spreadsheet. However, we only added 30 results to the spreadsheet since our study targeted only 4 participants. In order to come up with the 30 potential participants, we first vetted the credentials by going through the LinkedIn profiles, only those that we thought would best enhance our study were selected. For each chosen candidate, we noted his or her name, risk experience, location, and any other relevant information listed in the profile. This information is already available for public consumption, and as such, we have implied consent. Each potential participant was then sent a personalized recruitment message explaining the study and how we had identified him or her as a possible participant.

Out of the 30 invitations sent out, 27 responses were received. The next step was to draw a sample of 4 interviewees from the 27 responses received. To achieve this, researchers employed the order by which the response to invitations was received. However, the responses: 1, 2, 5, and 11 ended up being chosen. The responses 5 and 11 were purposefully selected since the participants who sent them were risk experts employed by banks. It was necessary to include bank officials in our study because a lack of access to loans by SMEs (a barrier to effective risk management) was voiced in the literature review. However, the opinions expressed by the bank officials in our study are their own and do not reflect the views of their employers.

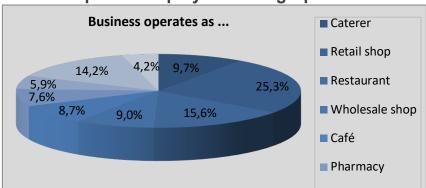
We recorded each interview and took notes at the same time. The audios for each interview were allocated codes as follows: bank employees, Participant – BE1 and Participant – BE2, then other business risk experts, Participant – BRE1 and Participant – BRE2.

4. RESULTS AND DISCUSSION

The survey questionnaire constituted the main source of primary data in this study, even though personal interviews were also used. Hence, the results of the quantitative survey questionnaire will be discussed first. Direct quotes from risk experts that are deemed necessary are used to complement and validate the findings of the survey questionnaire.

4.1. Descriptive Statistics and graphical displays

The descriptive statistics were computed based on the frequencies in each category and the total sample. The descriptive statistics were then displayed graphically to provide a visual representation of the individual variables.



4.1.1. Graphical display of demographic variables

Figure 2: Pie with 3D visual effect showing as what business is operating as **Source**: 'authors' own

According to Figure 2, the majority of our respondents are in retail (25.3%), followed by the restaurant (15.6%) and then convenient (14.2%). Very few of our respondents are trading products that are subject to stringent regulations like alcoholic products (5.9%) and medical products (7.6%). Then the respondents, who have selected "other businesses that they are operating as, indicated mostly businesses that require less capital to set-up and run them, these businesses include "small butcheries, chicken and chips shops, fruit and vegetable shops, hair salons. A close analysis of these results depicts that less regulation and less start-up capital are the most notable characteristics of FMCG SMEs.

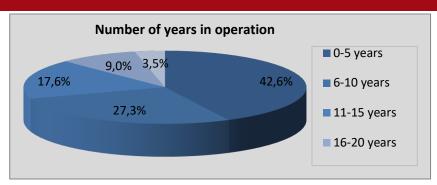


Figure 3: Pie with 3D visual effect showing the number of years in operation **Source**: 'author's own

As highlighted by Figure 3, the percentage of FMCG SMEs found within the period groups decreases as the number of years increases. Thus, the most influential period group is the 0-5 year group, within which 42.6% of the surveyed FMCG SMEs are found. This is followed by the 6-10 year group, which comprise 27.3% of the surveyed SMEs. The third-period group (11-15 years) made up 17.6% of the surveyed FMCG SMEs. Then, the 16-20 year group consists of 9.0% of the surveyed FMCG SMEs. The least dominant group is the more than 20 years group, which comprise only 3.5% of the surveyed FMCG SMEs. The distribution of the surveyed FMCG SMEs concerning the number of years in operation suggests that FMCG SMEs, in general, have a short life span.

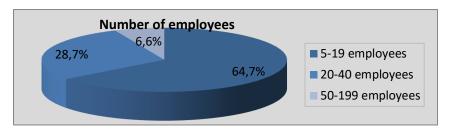


Figure 4: Pie with 3D visual effect showing the number of employees **Source**: 'authors' own

As shown in Figure 4, the respondents are not equally distributed in the different number of employee groups. Thus, 64.7% of the respondents indicated that there are 5-19 employees in their businesses, 28.7% have 20-40 employees in their business, and 6.6% have 50-199 employees in their companies. However, it should be noted that FMCG SMEs with a total number of permanent workers less than 5 (micro-enterprises) were excluded from the data processing since this study was

based only on Small and Medium-sized Enterprises.

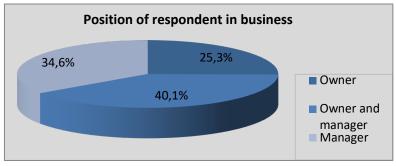


Figure 5: Pie with 3D visual effect showing position in business **Source:** 'authors' own

The results in Figure 5 indicate that all our questionnaires were completed by respondents who are more likely to make decisions and manage FMCG SMEs. Thus, 25.3% of the respondents reported that they are the owners of the business, 40.1% are the owners as well as the managers of the business, and 34.6% are the managers of the business.

4.1.2. Graphical display of the tools or methods used to identify risk

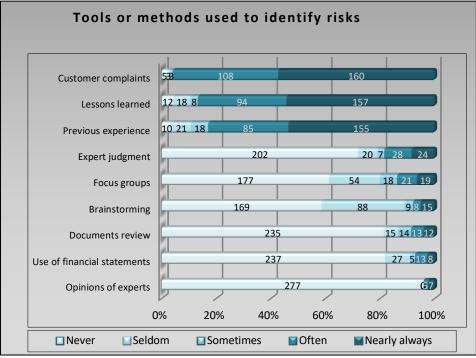
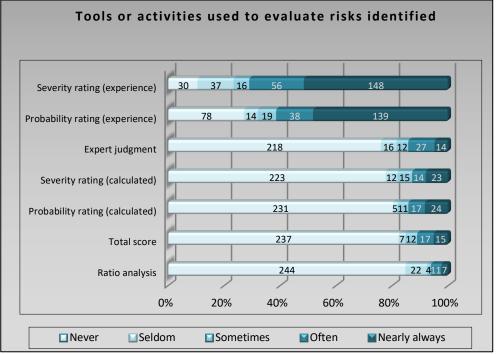
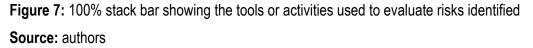


Figure 6: 100% stack bar showing the tools or methods used to identify risks **Source:** 'authors' own

From Figure 6, it is evident that expert judgment (23.2%), and group-based techniques like brainstorming (11.1%), and focus groups (20.1%) are less practiced by SMEs. This finding may be due to 'SMEs' inadequate level of knowledge and resources, as indicated by the survey results presented in Table 3. Also, it is quite evident that very few SMEs rely on document review (13.5%) and financial statements (8.7%) when identifying risks. This result may be due to 'SMEs' lack of accounting records and inadequate financial statements (lopev & Kwanum, 2012:153). It appears that most SMEs depend on customer complaints, lessons learned, and previous experience when identifying risks in their business. *The results of the personal interviews did not show any parallel or new data regarding the tools or methods used to identify risks by FMCG SMEs.*







Past studies have shown that risk owners often rely on the mathematics to determine the probability of risk realization and the severity of the impact thereof (Sikich, 2016; Covello, Menkes, & Mumpower, 2012:505; Lewis, 2004:xiii). In contrast, evidence from the survey questionnaire suggests that FMCG SME owner-managers evaluate the probability and severity of risk occurrence using their own experience and intuition. This is confirmed by the results in Figure 10, which indicate that SMEs have limited resources and knowledge to practice risk management formally and adequately. Furthermore, the survey questionnaire results in Figure 8 suggest that most SME owner-managers avoid any risk event regardless of their level of probability and severity. *This is in congruence with the results of the personal interviews, which did not reveal any evidence of tools or activities which are used to evaluate risks in FMCG SMEs.*

4.1.4. Graphical display of the tools or activities used to manage risks identified

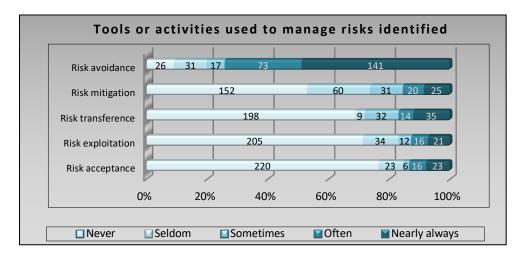


Figure 8: 100% stack bar showing the tools or activities used to manage risks identified **Source:** authors

About risk treatment, the survey mentioned above questionnaire results have revealed that risk transfer, e.g. through insurance is less practiced in SMEs. This finding endorses the finding of a previous study conducted by the Insurance Council of Australia (2008), which shows that SMEs have the highest rate of non-insurance.

From a qualitative point of view, the response from one of the risk experts interviewed that supports the result above is:

"""...most of them do not take out insurance, they either increase the price or use their personal funds to rescue their business when a risk has taken place""..." (Participant – BRE2)

Also, the survey questionnaire results in Figure 8 show that the least practiced methods of treating risks in SMEs have proved to be risk acceptance, risk mitigation, and risk exploitation. The results further show that most SME owners and managers regard risk avoidance as the most preferred method of treating risks in their businesses. *In the personal interviews, the risk experts concurred with these results, but also noted that the majority of the methods used by SMEs to manage or treat risks are either informal or reactive, for example, the classical way of developing a credit policy is mostly absent (see table 3) and instead, friendship, trust and customer loyalty come into play. Accordingly, below is what the risk experts had to say:*

"SMEs generally do not have specific risk management plans in place. Their approach is to wait for problems to take place and then look for solutions to solve them as soon as possible. This would mean waiting for a cash register machine to break and then hire an expert to fix it or assuming workers are satisfied until one of them lodges a complaint". (Participant – BRE1)

"""Risk management practices in retail SMEs are mostly informal due to ignorance and lack of understanding of proper risk management, for example, most of them do not take out insurance, they either increase the price or use their personal funds to rescue their business when a risk has taken place, some even employ their friends or relatives as a way of avoiding risks like employee theft. Moreover, credit facilities are in most cases given to clients based on friendship, trust, and customer loyalty""". (Participant – BRE2)

4.1.5. Graphical display of the tools or activities used to monitor risks

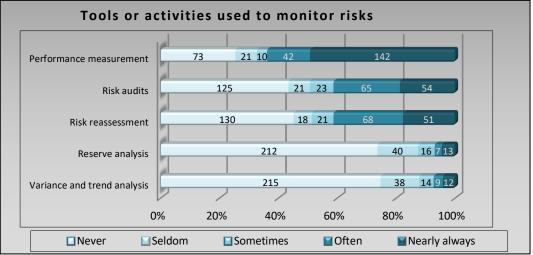


Figure 8: 100% stack bar showing the tools or activities used to monitor risks **Source:** 'authors' own

In terms of risk monitoring, the survey, as mentioned above, questionnaire results have shown that variance and trend analysis, and reserve analysis are the least practiced methods of risk monitoring in SMEs. This finding is substantiated by the absence of budgetary control and contingency fund account in SMEs (See Table 3). Furthermore, the survey questionnaire results revealed that risk re-assessment and risk audits are less practiced in SMEs. The most practiced method of monitoring risks in SMEs turned out to be performance measurement. However, the effectiveness of this method is questionable since a study by Hathway Management Consulting (2013:6) showed that SMEs do not have written business objectives, yet clearly defined business objectives are central for performance measurement. *The results of the personal interviews did not show any parallel or new data regarding the tools or activities used to monitor risk.*

4.1.6. The existing elements of risk management in SMEs
Table 3: The existing aspects of risk management in SMEs

14. Do the following aspects of risk management exist in your business?						
14.a	A risk appetite is set	Yes	51	17.6%		
		No	238	82.4%		
14.b	A credit risk policy is developed and implemented	Yes	31	10.7%		
		No	258	89.3%		
14.c	Offer employee development programs and	Yes	60	20.8%		
	continuing education	No	229	79.2%		

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14.d A system of budgeting and cost control is implemented to reduce the risk of continued unfavorable cost variances	Yes No	38 251	13.2% 86.8%
14.e A contingency fund is set aside for responding to	Yes	38	13.2%
identified risks	No	251	86.8%
14.f A risk management plan exists	Yes	56	19.4%
	No	233	80.6%
14.g A risk response strategy is developed and	Yes	67	23.2%
implemented	No	222	76.8%
14.hAll staff levels are involved in risk management	Yes	47	16.3%
	No	242	83.7%
14.i A risk management framework is developed or	Yes	80	27.7%
adopted	No	209	72.3%
14.j Effective mechanisms of internal control are	Yes	72	24.9%
developed	No	217	75.1%
14.k Risk management is incorporated into the operating	Yes	160	55.4%
process and system design	No	129	44.6%
14.1 The risk management process is regularly	Yes	166	57.4%
monitored, reported and kept up to date	No	123	42.6%
14.m Risks are actively identified, categorized,	Yes	194	67.1%
prioritized and documented before being treated	No	95	32.9%

Source: 'authors' own

The feedback on the elements of risk management that exist in the SMEs indicates that the essential elements of effective risk management are mainly absent in SMEs. The features of risk management that exist mostly in SMEs appear to be:

- Risks being actively identified, categorized, prioritized, and documented before risk treatment, which is a good starting point for an effective risk management system.
- The risk management process is regularly monitored, reported, and kept up to date.
- Risk management is incorporated into the operating process and systems design.

However, further analysis of the results revealed that there is an association between the period businesses are operating in and the elements of risk management that exist in SMEs. Thus, in all the above scenarios, more business which served more than ten years indicated yes than businesses which operated 0-10 years (See Table 4 and Figure 10).

Table 4: Statistically significant chi-square test

Quest	ion/Statement	Sample Size	Chi- Square	DF	P-Value			
Period business is operating in versus:								
14a	A risk appetite is set	289	143.7882	1	<0.0001			
14b	A credit risk policy is developed and implemented	289	80.6254	1	<0.0001			
14c	Offer employee development and continuing education	289	143.8727	1	<0.0001			
14d	A system of budgeting and cost control is implemented to reduce the risk of continued unfavorable cost variances	289	101.5874	1	<0.0001			
14e	A contingency fund is set aside for responding to identified risks	289	101.5874	1	<0.0001			
14f	A risk management plan exists	289	129.9956	1	<0.0001			
14g	A risk response strategy is developed and implemented	289	161.5772	1	<0.0001			
14h	All staff levels are involved in risk management	t 289	130.3204	1	<0.0001			
14i	A risk management framework is developed or adopted	289	204.6835	1	<0.0001			
14j	Effective mechanisms of internal controls are developed	289	180.5973	1	<0.0001			
14k R	isk management is incorporated into the operating process and system design	289	100.3542	1	<0.0001			
141	The risk management process is regularly monitored, reported and kept up to date	289	92.2280	1	<0.0001			
14m	Risk are actively identified, categorized, prioritized and documented before being treated	289	60.9519	1	<0.0001			

Source: 'authors' own

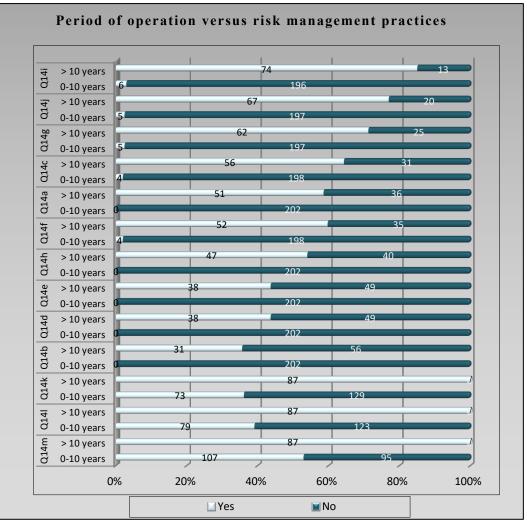


Figure 9: Period of operation versus risk management practices **Source:** 'authors' own

The results in Figure 9 show that:

- ✓ For the statement "Risks are actively identified, categorized, prioritised and documented before being treated," 100.0% of the respondents in businesses that are in operation for more than 10 years indicated yes, while 53.0% of the respondents in firms which are in service for 0-10 years indicated yes.
- ✓ For the statement "The risk management process is regularly monitored, reported and kept up to date" 100.0% of the respondents in businesses which are in operation for more than 10 years indicated yes, while only 39.1% of the respondents in firms which are in service for 0-10 years indicated yes.
- ✓ For the statement, "Risk management is incorporated into the operating process and systems design" 100.0% of the respondents in businesses which are in

operation for more than 10 years indicated yes, while only 36.1% of the respondents in companies which are in service for 0-10 years indicated yes.

Therefore, the results, as mentioned earlier, are an indication that an SME that has existed for many years may point to a more elaborated risk management structure in that enterprise. Also, the fact that SMEs which are in operation for 0-10 years did not indicate the presence of some aspects of risk management in their businesses further supports the assumption that the survival of SMEs is adversely influenced by the accumulation of risks, which stem from lack of effective risk management practices. Similarly, such concerns regarding risk management and the survival of SMEs were also voiced in the previous studies (Islam & Tedford, 2012:3; Pyeman, Rashid, Hanif, Mohamad & Tan, 2015:247; Kaminskaite, 2017:11; Smit & Watkins 2012:6325). This research has thus further supported the view that SMEs with effective risk management mechanisms in place are likely to have a long life span than those without.



4.1.6. Graphical display of the main barriers to effective risk management

Figure 10: 100% stack bar showing the main barriers to effective risk management **Source:** 'authors' own

Although Figure 10 shows that SMEs are faced with multiple obstacles which hinder the effectiveness of their risk management, lack of risk knowledge has turned out to be the most significant one. Interestingly, lack of knowledge was also identified as the most significant obstacle in a similar study conducted by Zivanai, Onias, Lloyd, Felix and Chalton, (2014:195). *The risk experts interviewed concurred with the previous results, as noted in the following sentiments shared:*

"Lack of competent employees who can identify and manage risks is a big one and what makes it even worse is the fact that they don't have the required cash to outsource services of experienced risk professionals, so risk management remains problematic within small retailers". (Participant – BRE1)

"""I think the absence of expertise and knowledge in retail SMEs is a huge obstacle for them to implement effective risk management. Most of them are managed by people with a low level of education who could be the owners...." (Participant – BRE2)

Furthermore, Figure 10 shows that an overwhelming majority of the survey questionnaire participants perceive that the cost of implementing risk management exceeds the benefit thereof. *This finding is in sync with the verbal response of one of the risk experts interviewed who had this to say:*

"...most of them view risk management as an additional cost which could have a huge impact on their profit. They actually don't see the need to have it". (Participant – BRE2)

Figure 10 further shows that a lack of financial resources is another significant hurdle that many SMEs are facing in their efforts to implement effective risk management. Worse still, an overwhelming majority of the questionnaire survey participants have indicated that their profit margins are usually small to sustain risk management. *Sadly, the personal interviews with the bank employees revealed that a tiny percentage of the SMEs' loan applications get approved due to mainly lack of credit history and lack of transaction history (bank statement). Accordingly, bank employees made the following comment:*

"Yes, we do, but the quality of applications we receive is the biggest challenge. Like I said before, several small businesses keep cash on their business premises even those with accounts, very few deposit all their proceeds into the bank account yet the most important source of financials is the bank statement, so by not depositing all their proceeds in the bank account, they may be disadvantaged when they ask for funding because their statements do not show all their revenue". (Participant – BE1)

"""Yes, but often you will find that because these entrepreneurs have no credit history, they get turned away when they apply for loans, only around 15% of our small to medium enterprise clients get their loan applications approved""". (Participant – BE2)

5. CONCLUSION

The high failure rate of businesses and the vulnerability a cohort of the SMEs has rendered risk management a very relevant area of research. Despite the vulnerability of Fast Moving Consumer Goods Retailers operating as Small and Medium Enterprises (FMCG SMES) in South Africa, there is a dearth of research on their sustainability and particularly their ability to mitigate risks. Many will agree that this research that the survival of SMEs is adversely influenced by the accumulation of risks, which stem from a lack of effective risk management practices. In an attempt to fill this knowledge gap, this paper investigated the risk management practices of FMCG SMEs in the Cape Metropolitan Area. The findings revealed that the FMCG SMEs have risk management mechanisms in place, but the tools are too simplistic and very informal. Even so, it was noted major that SMEs that existed for ten or fewer years tend to lack the crucial elements of a useful risk management tool kit as dictated by best practice. Aligned to this was the lack of budgetary control and contingency fund account in SMEs; lack of risk knowledge and so forth. As such, this paper proposes a practical risk management frame that is aligned with the needs of FMCGs. The framework presented in the article was informed by the empirical results and best practice as documented in the literature. The goal is to create a knowledge base that offers a unifying frame which aggregates and structure these critical elements frugally. These elements are portrayed in the form of a map shown in Figure 11:

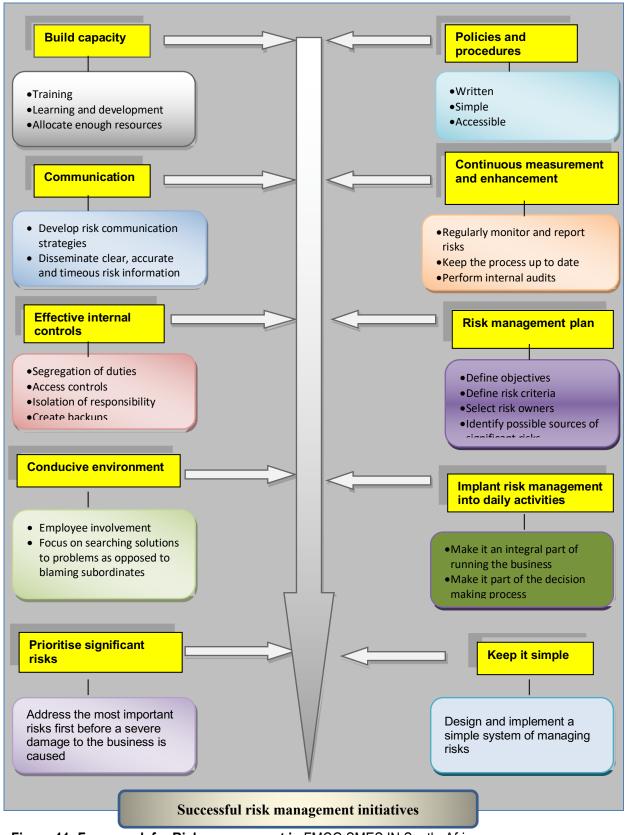


Figure 11: Framework for Risk management in FMCG SMES IN South Africa Source: 'author's own

6. IMPLICATIONS

The findings of this paper bear implications in the areas of both academic circles and business. The paper contributes to the body of risk knowledge, by finding certain critical elements that are crucially important to manage risks within the FMCG SMEs successfully (see figure 11). In addition, this paper will help SME risk experts to recognize critical elements that have been proven to either cause an obstacle or foster effective risk management. From the risk manager's point of view, this paper demonstrates why certain elements should be considered to achieve a system of risk management.

6. LIMITATIONS AND STUDY FORWARD

The results of the current study were based on a sample of 320 FMCG SMEs and two risk experts. The future studies must incorporate a larger sample size for both the survey of SME owner-managers and personal interviews with risk experts, to generate substantial data and for better generalisation of the findings. It is further suggested that both rural and urban-based FMCG SMEs be involved, to overcome the provincial imbalance of the current study. Thus, another fruitful avenue for future studies could be a comparative study between South African FMCG SMEs in urban and rural areas. The larger and diverse structure of the sample size is likely to accomplish more in-depth data regarding risk management of FMCG SMEs in South Africa.

DISCLOSURE OF CONFLICT

The authors declare that they have no conflicts of interest.

AUTHOR(S) DETAILS

Job Dubihlela, PhD. The Department of Internal Auditing and Financial Information Systems Cape Peninsula University of Technology, Cape Town E-mail: <u>dubihlelaj@cput.ac.za</u> ORCID ID: <u>https://orcid.org/0000-0001-6228-6524</u> Oscar Chakabva, PhD. The Department of Internal Auditing and Financial Information Systems Cape Peninsula University of Technology, Cape Town E-mail: <u>chakabvao@gmail.com</u> ORCID ID: <u>https://orcid.org/0000-0002-5357-1363</u>

Robertson Tengeh, PhD. The Department of Entrepreneurship and Business Management Cape Peninsula University of Technology, Cape Town E-mail: <u>tengehr@cput.ac.za</u> ORCID ID: <u>https://orcid.org/0000-0003-2485-0205</u>

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