A PERFORMANCE MEASUREMENT FRAMEWORK TO ENHANCE THE SUCCESS AND SURVIVAL OF RETAIL MICRO, SMALL AND MEDIUM ENTERPRISES

by

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DECLARATION

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I Isaac Mabhungu, declare that:

A Performance Measurement Framework to Enhance the Success and Survival of Retail Micro, Small and Medium Enterprises

is my own work and that all the sources that I have used or quoted have been indicted and acknowledged by means of complete references.

28/07/2017

Signed Date

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DEDICATION

This study is dedicated to my mother who instilled in me the spirit of working hard and my wife who is always a pillar of strength every time I feel like giving up.

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ABSTRACT

The study sought to investigate the performance measurement practice of retail Micro, Small and Medium Enterprises (MSMEs) in Zimbabwe and to develop a performance measurement framework for monitoring and managing the performance of retail MSMEs in developing countries. The performance measurement framework may enhance the chances of success and survival of these retail MSMEs. The framework was developed based on a review of the literature and an empirical study. Questionnaires were administered to 373 owner/managers of which only 189 responded. Interviews were held with 20 senior employees in the accounts/finance departments of MSMEs. Stratified random sampling was employed to select the 20 senior employees interviewed. Interviews were also held with eight (8) owner/managers who were purposively selected from the 189 MSMEs who participated in the study. It was established that most of the MSMEs do not measure the CSFs identified from the literature review. The study identified innovation, management of costs, and management of customers, management of competitors, market scanning, employee motivation, and management of regulators as the factors that need to be measured and monitored if MSMEs are to succeed. The performance measurement framework which emerged from the study focused more on measurement of non-financial performance rather than financial performance. Most owner/managers interviewed indicated that the proposed performance measurement framework can be used to enhance the performance of MSMEs. The study recommends that a confirmatory study such as structural equation modelling should be carried out in order to test the cause-effect relationship between the CSFs identified in this study. The study also recommends a longitudinal study where the researcher will assess the performance measurement practices of the retail MSMEs over time rather than relying on the perceptions of owner/managers and employees of the MSMEs.

Keywords: Critical success factors, MSMEs, performance measurement, survival, retail

CHAPTER ONE: BACKGROUND TO THE STUDY

1.1 INTRODUCTION

Performance measurement might be a very topical subject among researchers that has withstood the test of time. It is a subject that cuts across a number of disciplines; industrial sectors; sizes of organisations; types of organisations, whether profit making or non-profit making; types of countries, whether developed or developing, and the list goes on and on. Researchers from different backgrounds such as accounting, marketing, human resources, supply chain management and engineering continue to research on performance measurement in an attempt to achieve their different objectives. This study joins in the other possibly ongoing studies on performance measurement by seeking to develop a performance measurement framework to enhance the success and survival of retail MSMEs in developing countries.

The purpose of this introductory chapter is to set the foundation for the study. Section 1.2 outlines the background to the problem focusing on the significance of Micro, Small, and Medium Enterprises (MSMEs) to both developed and developing economies, including Zimbabwe. It also highlights some of the challenges faced by the MSMEs in Zimbabwe and the importance of performance measurement in an enterprise. Section 1.3 outlines the rationale for the study, Section 1.4 states the thesis statement. The problem statement is presented in Section 1.5 and research objectives in Section 1.6. The delimitations and limitations for the study are presented in Section 1.7 while Section 1.8 focuses on definitions of terms as used in this study. The assumptions underlying this study are presented in Section 1.9 and the research methodology briefly outlined in Section 1.10. Ethical considerations are highlighted in Section 1.11 and the significance of the study in Section 1.12. Section 1.13 gives an overview of the study while Section 1.14 gives a summary of the chapter.

1.2 BACKGROUND TO THE STUDY AND THE PROBLEM

The background to the study highlights the importance of MSMEs to the global economy in general and to the Zimbabwean economy specifically, as Zimbabwe is the focus of this study. The challenges faced by MSMEs in Zimbabwe are also highlighted. The concept of performance measurement is introduced in this section

and its possible role in enhancing the success and survival of MSMEs is briefly discussed.

1.2.1 The significance of MSMEs in selected countries

Recent studies highlight the importance of MSMEs in employment creation, poverty alleviation and economic development in both developed and developing economies (Asah, Fatoki & Rungani, 2015; Isaga, Masurel & Van Montfort, 2015; Massa, Farneti & Scappini, 2015; Yazdanfar & Öhman, 2015; Gherhes, Williams, Vorley & Vasconcelos, 2016; Jitmaneeroj, 2016; Padachi & Bhiwajee, 2016; Valaei, Rezaei & Ismail, 2017). Table 1.1 highlights the contribution of MSMEs to the Gross Domestic Product (GDP) and employment creation as well as their number as a percentage of all businesses in selected countries.

Table 1.1: Contribution of MSMEs in selected countries

Country	% of all businesses	GDP	Employment	Source
China	99.3%	60%	80%	Zhao & Wang (2015), National Bureau of Statistics of China
UK	99.9%	47%	60%	Hutchinson, Donnell, Gilmore & Reid (2015)
Australia	96%	33.1%	63%	DIISR (2011)
Italy	99.9%	68.1%	81%	European Commission (2016)
Ireland	99.7%	46.2%	68%	Ipinnaiye, Dineen & Lenihan (2017)
Tanzania	95%	33%	40%	Mgeni (2016)
Kenya	90%	18%	80%	Katua (2014)
South Africa	90%	42%	60%	Abor & Quartey (2010)
Ghana	92%	70%	85%	Abor & Quartey (2010); Ackah & Vuvor (2011)

The statistics presented in Table 1.1 reveal that MSMEs play a pivotal role in the economic development of both developing and developed countries. Therefore, the

owner/managers of MSMEs may need to embrace any study that seeks to enhance the survival and success of MSMEs.

1.2.2 The significance of MSMEs in Zimbabwe

Micro, Small and Medium Enterprises (MSMEs) play a significant role in the economic development of Zimbabwe. A survey by Finmark Trust revealed that Zimbabwe has 3,5 million MSMEs, with an estimated turnover in 2012 of US\$7,4 billion and employing 5,7 million people (Block, 2013). Chinamasa (2013) also highlights that a survey by Finscope in 2012, found that Zimbabwe's MSMEs contribute more than 60% to the GDP and employ more than 5, 8 million people. According to the Reserve Bank of Zimbabwe (2007)'s monetary policy review statement, 80% of the population in Zimbabwe depends on MSMEs for their livelihood. The high level of unemployment in the country as a result of the economic meltdown in the last 20 years or so and the government's indigenisation program may have encouraged the majority of people to resort to entrepreneurship in order to earn a living. This may suggest that the contribution of MSMEs in employment creation and economic development in Zimbabwe is significant. Chinamasa (2013) argues that strategies that target the development of MSMEs provide some benefits to the country in terms of growth, employment generation, and support to the fiscus through taxes, among others.

1.2.3 The retail sector in Zimbabwe

The Zimbabwean economy is classified into a number of sectors, and the sectors which make major contribution to GDP are mining; transport and communication; manufacturing; agriculture; and retail (Zimbabwe National Statistics Agency, 2014). The retail sector is the largest sector of the economy and made the highest contribution to the GDP in 2013, contributing at least 15.3% (African Economic Outlook, 2014). This is also supported by the Zimbabwe Revenue Authority (2014) which indicated that Value Added Tax (VAT) contributed the highest tax revenue of 28% in 2014. It is plausible that much of the VAT was from the retail sector as the manufacturing sector is currently experiencing very low capacity utilisation of 36.3% (Confederation of Zimbabwe Industries, 2014). The Zimbabwean economy is sustained more by commercial activities (that is buying and selling) rather than manufacturing and processing activities. A survey by Zimbabwe National Statistics

Agency between August 2013 and June 2014 indicated that 59.2% of business operators are in the retail trade (Zimbabwe National Statistics Agency, 2014). The Zimbabwean economy has witnessed a declining manufacturing sector for the past years (Confederation of Zimbabwe Industries, 2014). It may, therefore, be argued that much of the economic activity in the Zimbabwean economy is in the retail sector and thus the sector plays an important role in the economic development of Zimbabwe.

1.2.4 Definition of MSMEs

The definition of MSMEs in most countries is similar to the definition provided by the European Commission. According to Da Costa Marques (2012: 51), the European Commission gave the definitions as portrayed in Table 1.2.

Table 1.2: Definition of Micro, Small and Medium Enterprises

Category	Number of workers	Business Amount
Medium-sized enterprise	<250	43 million euros
Small enterprise	<50	10 million euros
Micro-enterprise	<10	2 million euros

Source: da Costa Marques (2012: 51)

Although definitions for the terms micro, small, and medium enterprises are explicit, it seems at times that these enterprises are not separated and are considered collectively and referred to as MSMEs. The study focuses on MSMEs as defined by the European Commission in terms of the number of employees.

1.2.5 The failure of MSMEs

The main challenge faced by most MSMEs the world over is the ability to sustain their operations. A number of studies indicate that the failure rate among MSMEs is very high and most do not survive beyond their first years of operation (Ates, Garengo, Cocca and Bititci, 2013; Asah *et al.*, 2015; Parnell, Long & Lester, 2015; Zhao & Wang, 2015; Lampadarios, 2016; Maduekwe & Kamala, 2016). In Zimbabwe, most MSMEs fail within few years of operating despite the finance and other resources they receive from government and other development partners (Mudavanhu, Bindu, Chigusiwa, & Muchabaiwa, 2011). A number of studies also

reveal that lack of access to finance is not the main cause for failure of MSMEs as alleged by most of the MSMEs (Blumberg & Letterie, 2008; Robb & Fairlie, 2008; Frazer, Weaven & Grace, 2012). The other causes of failure identified in previous studies are lack of access to markets; inappropriate infrastructure; lack of marketing skills and market knowledge; inadequate management and entrepreneurial skills; lack of access to land; lack of information and a hostile regulatory environment (Blumberg & Letterie, 2008; Mudavanhu *et al.*, 2011; Arasti, Zandi & Talebi, 2012; Nyamwanza, Paketh, Mhaka, Makaza & Moyo, 2015; Baporikar, Nambira & Gomxos, 2016; Lampadarios, 2016).

Literature suggests that a significant number of individuals are pushed into starting small businesses due to unemployment (Papadaki & Chami, 2002; Asah *et al.*, 2015; Baporikar *et al.*, 2016). For example, Frazer *et al.* (2012) observed that most of failed small business owners in Australia had ventured into business not by choice or to explore business opportunities, but to get employed. This may also be the case in Zimbabwe given that about 50% of economically active persons are self-employed (Zimbabwe National Statistics Agency, 2013).

There is a possibility that some of the people establishing these MSMEs in Zimbabwe have not obtained any training to operate a business. Chingwaru (2016) quotes the Vice President of Zimbabwe, Mnangagwa as having stressed the need for grooming MSMEs in business planning, marketing, quality assurance, product distribution, effective costing and performance reporting so as to reduce their failure rate. One other intervention to MSMEs failure suggested in previous studies is designing and implementing an effective performance measurement system (Garengo, Biazzo & Bititci, 2005; Srimai, Radford & Wright, 2011; Simpson, Padmore & Newman, 2012; Ahmad, Zabri & Omar, 2015; Pekkola, Saunila & Rantanen, 2016; Saunila, 2016; Sorooshian, Aziz, Ahmad, Jubidin & Mustapha, 2016; Van Looy & Shafagatova, 2016). Hence, the need for developing a simple performance measurement framework which may be used by retail MSMEs to enhance business performance and possibly reduce failure rate.

The need for intervention is also confirmed by Chinamasa (2013) who proposed that the government of Zimbabwe should develop a comprehensive database on MSMEs which would facilitate the formulation of targeted interventions, as well as effective performance monitoring and evaluation systems for the sector.

1.2.6 The concept of performance measurement

Some scholars argue that a performance measurement system can improve the performance of an enterprise (Garengo et al., 2005; Taticchi, Tonelli & Cagnozzo, 2010; Harif, Hoe & Ahmad, 2013; Matsoso & Benedict, 2014; Ahmad et al., 2015; Akpabot & Khan, 2015; Maduekwe & Kamala, 2016; Sorooshian et al., 2016). According to Neely, Gregory and Platts (2005: 1229) performance measurement can be defined as "a process of quantifying the efficiency and effectiveness of a process" and a performance measure is defined as "a metric used to quantify the efficiency and/or effectiveness of an action." They went on to define a performance measurement system as "the set of metrics used to quantify both the efficiency and effectiveness of an action." Neely, Adams and Kennerly (2002) define a performance measurement and management system as a system that gathers, elaborates, and analyses information needed for decision-making purpose. In broad terms, performance measurement is the means by which an enterprise can evaluate and monitor its important activities and processes (Chong, 2008; Ahmad et al., 2015; Sorooshian et al., 2016; Gerba & Viswanadham, 2016; Maduekwe & Kamala, 2016). Therefore, these definitions may suggest the existence of a relationship between performance measurement and MSMEs' success and survival.

1.2.7 Performance measurement and an enterprise's success and survival

The measurement of an enterprise's performance is often cited as a cornerstone for its success (Cocca & Alberti, 2010). Researchers belonging to different time periods and disciplines appear to be unanimous that performance measurement has an influence on the success and survival of a business enterprise (Garengo *et al*, 2005; Gomes & Yasin, 2011; Srimai *et al.*, 2011; Taticchi, Balachandran & Tonelli, 2012; Zeglat, AlRawabdeh, AlMadi & Shrafat, 2012; Klovienė & Speziale, 2015; Gerba & Viswanadham, 2016; Sorooshian *et al.*, 2016). There is an on-going argument that performance measurement is a crucial business tool in enhancing business performance in the sense that it helps in monitoring and evaluating the enterprise's key activities (Taticchi & Balachandran, 2008; Taticchi *et al.*, 2010; Amir, 2011; Goh, 2012; Hegazy & Hegazy, 2012; Waweru & Spraakman, 2012; Zeglat *et al.*, 2012; Al-Matari, Al-Swidi & Fadzil, 2014; Akpabot & Khan, 2015; Saunila, 2016). Thus, it is vital to have a suitable performance measurement framework in place which enterprises can make use of in order to succeed and survive.

It might be important to question how measurement of an enterprise's performance is linked to its survival. One may argue that having a performance measurement framework in place may influence the managers' belief system and the way they conduct their business (Srimai *et al.*, 2011). Taticchi *et al.* (2012) argue that the measurement of business performance encourages management to be proactive rather than reactive. This is the case if the performance measures are forward looking rather than focusing on the past as is the case with most financial measures (Gallani, Krishnan & Kajiwara, 2015). Thus, if it is likely that there are any operational challenges to be encountered in the future, the enterprise will begin preparing for such an eventuality now and, therefore, safeguard survival and continuity of the business.

Performance measurement may influence managers to establish strategic plans for their enterprises (Ahmad *et al.*, 2015; Pekkola *et al.*, 2016). Kellen (2003) highlights the importance of strategic planning in the success of an enterprise. Performance targets need to be in line with the enterprise's business strategy (Matsoso & Benedict, 2014). It is evident from literature that what gets measured gets attention (McAdam, 2000; Neely, Adams & Crowe, 2001; Cocca & Alberti, 2010) and you cannot improve something that you cannot measure (Cho & Lee, 2005; Salaheldin , 2009; Van Looy & Shafagatova, 2016). There is also an argument that although it is not always obvious that an enterprise succeeds in everything it pays attention to, it is almost obvious that an enterprise fails in things it does not pay attention to (Davenport & Beck, 2002). Therefore, measuring the performance of business may force owners/managers of the enterprises to decide on factors that are critical to the success and survival of the enterprises, and design frameworks for measuring and managing the factors.

A performance measurement system may influence enterprises to evaluate their activities. This is done so as to ascertain if the enterprise is still on course towards achieving its objectives. Simons (2000) indicates that the measurement of performance assists businesses to set goals and provide feedback on the progress towards those goals. The need to continuously monitor performance and make adjustments as and when performance deviate from the required levels is critical for the success of MSMEs (Simpson *et al.*, 2012; Gerba & Viswanadham, 2016). Therefore, it is plausible that performance measurement acts as a compass to focus

and direct an enterprise towards the achievement of its strategic objectives (Alfaro, Ortiz & Poler, 2007).

A system of performance measurement may help in aligning different activities or enterprise units to ensure that synergy is realised. This is supported by Kaplan and Norton (2001) who argue that performance measurement systems provide insight into different units or levels of analysis and this helps to assess whether there is synergy among the units and also aligns the units to the enterprise's objectives. Such an alignment is likely to promote efficient use of resources (Neely *et al.*, 2005). It also encourages the enterprises to capitalise on their economies of scale (Taschner, 2016). Hence the enterprise might become competitive and enhance its chances of success and survival. Some authors also indicate that in order for an enterprise to survive, it is essential for it to satisfy the competing needs of its various stakeholders (Garengo *et al.*, 2005; Neely, 2005; Chong, 2008; Cocca & Alberti, 2010; Taticchi *et al.*, 2012). Therefore, any meaningful performance measurement framework should focus on managing the enterprises' internal and external stakeholders.

One may argue that the benefits accruing from the measurement of the performance of an enterprise cannot be easily disputed considering the available literature in support of performance measurement (Cocca & Alberti, 2010; Taticchi, et al., 2010; Gomes & Yasin, 2011; Srimai et al., 2011; Taticchi et al., 2012). Given such a remark, one may also argue that there is no longer any need to continue investing time in the study on performance measurement in enterprises, given the extent of research that has been conducted on the subject in the past. While it may be correct to argue that there has been a lot of research on performance measurement over the years, there are still a lot of unresolved issues on the subject especially with regard to performance measurement in SMEs in general and Micro Enterprises (MEs) in particular (Garengo et al., 2005; Chong, 2008; Taticchi et al., 2010; Simpson et al, 2012; Akpabot & Khan, 2015; Saunila, 2016; Zerfass & Winkler, 2016). For example, some scholars argue that the existing performance measurement frameworks are too complex, do not give guidance on their use or offer inconceivable performance indicators and, therefore, lack practical utility among most MSMEs (Pekkola et al., 2016; Van Looy & Shafagatova, 2016). Hence the current need for research on performance measurement frameworks which are practically useful to MSMEs.

The fact that a number of performance measurement frameworks have been proposed by researchers (Chennell, Dransfield, Field, Fisher, Saunders & Shaw, 2000; Kueng, Meier & Wettstein, 2000; Hudson, Lean & Smart, 2001; Hvolby & Thorstenson, 2001; Laitinen, 2002; Chong, 2008; Taticchi, Tonelli & Balachandran 2008; Chalmeta, Palomero & Matilla, 2012; Pekkola et al., 2016; Saunila, 2016) also pose problems for the practicing owner/ managers. This may also be evidence that research on the subject has not been conclusive. A review of the literature on performance measurement does not point towards an agreement amongst authors on the best performance measurement framework to be adopted by MSMEs (Neely, 2005; Klovienė & Speziale, 2015). Probably, the reason is that performance is a concept which has different meaning to different people and has a number of variables which are measured in a number of ways (Blackburn, Hart & Wainwright, 2013; Klovienė & Speziale, 2015; Gerba & Viswanadham, 2016). Thus, the concept is very complex and multi-dimensional in nature (Simpson et al., 2012). Hence, the need for designing a simple performance measurement framework in the context of retail MSMEs operating in a developing country like Zimbabwe arises

1.2.8 Measures of performance

There seem to be no agreement among scholars on the best measures of performance in MSMEs (Jamil & Mohamed, 2013; Fisher, Maritz & Lobo, 2014; Wach, Stephan & Gorgievski, 2016). This may stem from the entrepreneurs' various meanings attached to the concept of performance, which varies from being economic and objective (Parker, 2009; Wach et al., 2016) to non-economic and subjective (DeTienne, Shepherd, De Castro 2008; Jayawarna, Rouse, Kitching, 2011; Wach et al., 2016). Performance measures may be classified according to those relating to quality, time, flexibility, and cost (Neely et al., 2005; Bulak, Turkyilmaz, Satir, Shoaib & Shahbaz, 2016). Garengo and Biazzo (2012) indicate that performance measures can be sales growth; market share; customer satisfaction; profitability; and continued existence. Garengo et al. (2005) and Wach et al. (2016) argue that performance measures should incorporate the enterprise's goals and objectives. Some authors propose a need for developing performance indexes which incorporate a number of different performance measures (Simpson et al. 2012; Blackburn, Hart & Wainwright, 2013). It is, therefore, essential for this study to come up with a framework of performance measures applicable to MSMEs in the retail sector. Each enterprise would be encouraged to select those performance measures which best suit its context.

1.3 RATIONALE FOR THE PROPOSED STUDY

Most of the studies on performance measurement found in the literature review focus on large enterprises. A number of researchers argue that performance measurement frameworks designed for large enterprises often do not apply to MSMEs (Moore & Manring, 2009; Einwiller & Boenigk, 2012; Simpson et al., 2012; Ates et al., 2013; Zerfass & Winkler, 2016). Ates et al. (2013:29) argue that "the small firm is not a scaled-down version of a large firm and we cannot simply look at the needs of MSMEs by making small what is big." The preliminary review of the literature on performance measurement seems to suggest that literature on MSMEs in the retail sector is scarce. Scholars continue to argue the need for simple, flexible, easy to use, and inexpensive performance measurement frameworks among MSMEs (Simpson et al., 2012; Ates et al., 2013; Ahmad & Alaskari, 2014; Klovienė & Speziale, 2015; Pekkola et al., 2016). For example, Klovienė and Speziale (2015) argue that there is a clear need for developing a simple and general performance measurement framework which can be used by MSMEs in an effective and efficient manner. Hence, there may be a need to design a performance measurement framework tailor-made to meet the specific needs of retail MSMEs.

Most of the reviewed available literature seems to have a weakness of giving recommendations on what may be included in a performance measurement framework for MSMEs without developing one. Some of the suggestions seem to be of a general nature and may not be helpful in crafting a performance measurement tool which can be used by practitioners. Most of the frameworks available are theoretical in nature and their practical usefulness has not been ascertained (Garengo et al., 2005; Cocca & Alberti, 2010; Nudurupati, Bititci, Kumar & Chan, 2011; Ates et al., 2013; Pekkola et al., 2016). Therefore, the framework to be developed should have practical usefulness in addition to scientific usefulness.

The researcher has not found any literature to suggest that research was ever done on performance measurement in retail MSMEs in Zimbabwe. The operating environment of retail MSMEs in a developing country may be different from that of a developed country. The challenges which these enterprises face may be different

given the difference in the social, economic, and political landscapes. At the moment it is not clear whether the available performance measurement frameworks would be suitable for use by MSMEs in a developing country such as Zimbabwe. These MSMEs seem to exhibit characteristics different from the large enterprises and even similar enterprises in developed countries. This presents the motivation for developing a performance measurement framework suitable for retail MSMEs in developing countries, particularly in Zimbabwe.

1.3.1 Criticisms of the available frameworks

As highlighted earlier, literature (section 1.2.7) seems to suggest that most of the available performance measurement frameworks are not suitable for MSMEs. There seem to be limited performance measurement frameworks suitable for use by MSMEs. It also appears as if MSMEs are compelled to use models which do not suit their circumstances (McAdam, 2000; Garengo et al., 2005; Nudurupati et al., 2011). The assumptions held in performance measurement frameworks developed for large enterprises may not be valid when applied to MSMEs (Nudurupati et al., 2011). For example, some frameworks assume that enterprises have large customer bases and these customers are relatively homogenous in nature (McAdam, 2000). On the contrary, MSMEs have a diversity of customers ranging from individual customers to large corporations as well as from informal enterprises to formal enterprises. Hence, the need to develop a framework that reflects the diverse nature of the MSMEs' customers. Unlike large enterprises, MSMEs' employees have a closer relationship with the enterprises' customers (McAdam, 2000; Garengo et al., 2005; Hutchinson et al., 2015). This closer relationship with customers implies that there may be a need for designing a framework that maintains the relationship for the benefit of the enterprise.

The frameworks assume that managers of enterprises are full time employees who can directly oversee the implementation of the performance measurement frameworks (Cocca & Alberti, 2008). However, some scholars argue that owner/managers of MSMEs lack time to manage their enterprises (Fatoki, 2014; Gherhes *et al.*, 2016). As a result, these owner-managers might need frameworks which enable them to monitor and control their enterprises within the limited time they have.

Most performance measurement frameworks assume that enterprises have a motive to create wealth and would, therefore, have performance measures which would result in value creation for the enterprise. On the contrary, some MSMEs are not formed to pursue wealth creation objectives but to pursue other personal, usually social objectives of the owner (Papadaki & Chami, 2002; DeTienne *et al.*, 2008; Jayawarna *et al.*, 2011; Simpson *et al.*, 2012; Wach *et al.*, 2015).

Lastly, some scholars criticise the methodological approaches adopted by most researchers when carrying out research on performance measurement in MSMEs. Scholars such as Simpson et al. (2012) argue that most research papers on the subject are not scientific since they fail to identify and control moderating, intervening, and contaminating variables when trying to establish the existence of cause-effect relationships between the independent variable and the dependent variable. They also argue that conclusions drawn from most of the research are based on the opinions and perceptions of managers. These opinions and perceptions are gathered using self-report questionnaires which are not reliable data collection instruments (Simpson et al., 2012). Therefore, the researcher attempted to overcome this pitfall by complementing use of questionnaires with semi-structured interviews. The researcher also completed the questionnaire on behalf of most respondents in order to ascertain their level of comprehension to the questions in the questionnaire. This enabled the researcher to give clarity to certain questions which were not clear to the respondents.

1.4 THESIS STATEMENT

It is plausible that a performance measurement framework may lead to the success and survival of retail MSMEs. The MSMEs may be able to notice well in advance the key factors they are lacking and which have an influence on performance. They would then take corrective measures early enough thereby preventing failure.

1.5 PROBLEM STATEMENT

The biggest challenge which most MSMEs face is being able to sustain their performance, and hence survive for a long time (Ates *et al.*, 2013; Asah *et al.*, 2015; Parnell *et al.*, 2015; Zhao & Wang, 2015; Lampadarios, 2016; Maduekwe & Kamala, 2016). Okpara (2011) claims that MSMEs in developing countries fail at a higher rate than those in developed countries. He argues that MSMEs in developing countries

face problems unique from those faced by similar businesses in the developed countries. Part of the failure of the MSMEs may have nothing to do with the well-documented problems of lack of access to finance; markets and appropriate infrastructure. Frazer *et al.* (2012) argue that having access to finance will not always result in the success and survival of an enterprise. They argue that such finance may result in the enterprise having higher levels of debt if the source is a loan. The MSME may get into further difficulties if it fails to repay the loan which may even mean being liquidated.

In Zimbabwe, most MSMEs fail within few years of operating despite the finance and other resources they receive from government and other development partners (Mudavanhu *et al.*, 2011; Nyamwanza *et al.*, 2015; Chingwaru, 2016). The failure comes unnoticed by the owner/managers of these MSMEs (Chinamasa, 2013). Possibly, most of this failure may be avoided if these MSMEs have strategies in place to monitor their business performance (Chingwaru, 2016; Klovienė & Speziale, 2015; Gerba & Viswanadham, 2016; Sorooshian *et al.*, 2016). Hence, the need for a study to investigate the performance measurement practices of retail MSMEs, with a view of developing a performance measurement framework to enhance the performance and survival of the enterprises.

While previous studies have tended to focus on identifying the causes of failure for MSMEs, this study attempts to focus on the critical success factors for the performance of MSMEs and propose a performance measurement framework to manage the critical success factors. The study assumes that measurement of the critical success factors may lead to better management of the factors resulting in high performance, success, survival, and growth of the MSMEs. The study is premised on the view that the available performance measurement frameworks fail to meet the needs of most retail MSMEs. It also appears as if the thrust of most studies on performance measurement conducted so far was not in response to the failure of MSMEs and may not clearly indicate how performance measurement may prevent failure of the enterprises.

1.6 RESEARCH OBJECTIVES.

The main objective of the study is to develop a performance measurement framework to manage the critical success factors for the success and survival of retail MSMEs.

1.6.1 Specific objectives

The specific objectives of the study are to:

- Identify the potential critical success factors for the performance of MSMEs based on literature review.
- Investigate the current performance measurement practices of selected retail MSMEs in Harare, Zimbabwe.
- Establish the relationships between the extents of measurement of the proposed critical success factors for MSMEs operating in Zimbabwe.
- Determine the critical success factors whose extent of measurement has an influence on the performance of retail MSMEs in Zimbabwe.
- Develop a performance measurement framework applicable to MSMEs operating in the retail sector of a developing country like Zimbabwe.
- Assess the perception of owner/managers of MSMEs on the extent to which the proposed performance measurement framework can be used to influence the success and survival of MSMEs in Zimbabwe.

1.7 RESEARCH METHODOLOGY

The study was conducted in five parts. The first part identified through an extensive review of literature, the critical success factors which influence the business performance of the MSMEs. That is, identifying the key drivers of business performance in MSMEs as well as measures of those key drivers. The information enabled a comparison to be made between the key performance drivers and their measures identified in the study and the key drivers reported in the literature, thereby demonstrating how new knowledge is generated.

The second part established the current performance measurement practices of selected retail MSMEs in the central business district of Harare through questionnaires and semi-structured interviews. This enabled the researcher to know

what is happening on the ground in order to identify weaknesses of the current practice and propose possible improvement.

The third part of the study sought to develop a performance measurement framework for the retail MSMEs based on literature review carried out in part one and empirical study carried out in part two.

The fourth part of the study focused on assessing the perceptions of owner/managers of selected MSMEs on the practical usefulness of the proposed framework. This sought to establish if such a framework is likely to influence business success and survival of MSMEs. Possible weaknesses of the framework were identified and areas for improvement suggested. The fifth part of the study involved presentation of the final proposed performance measurement framework.

1.7.1 Population

The researcher was not able to establish the total number of the active formal retail MSMEs operating in the Central Business District (CBD) of Harare. It seems there is no up to date database for all the formal retail MSMEs operating in the CBD of Harare. However, the researcher was able to identify 373 active formal retail MSMEs operating in the CBD of Harare specialising in either of grocery, clothing and furniture/electrical products. The 373 retail MSMEs were those whose owner/managers had indicated their willingness to take part in the study. The MSMEs were identified from both the records of the ministry of small and medium enterprise and co-operative development and the physical check exercise conducted by the researcher and his research assistants.

1.7.2 Sample and sampling procedure

The city of Harare CBD was purposively chosen to be the study site. The study focused on all the 373 active retail MSMEs identified in the CBD of Harare, specialising in grocery, clothing and furniture.

1.7.3 Data collection

Questionnaires were administered to owner/managers of the retail MSMEs in order to get information on the performance measurement practices of the MSMEs in the retail sector in Zimbabwe. More detailed information on the performance measurement practice of MSMEs was obtained through interviewing the most senior

employees in the accounts/finance department of the MSMEs. These were considered to be more knowledgeable on the performance measurement practice of the MSMEs.

1.7.4 Pilot study

A pilot study was carried out in the CBD of Harare in order to check the reliability of the questionnaire and interview guide and therefore refine the questionnaire and the interview guide. A total of 25 questionnaires were administered to 25 owner/managers and interviews held with three senior employees in the accounts/finance section of the retail MSMEs specialising in motor spares and building materials. The results of the reliability test are presented in Section 4.8.

1.7.5 Data analysis

Coding involved assigning numerical values to responses in order to facilitate further analysis using SPSS version 20. Responses from interviews were coded into thematic areas and analysed further through the use of NVivo.

1.8 ETHICAL CONSIDERATIONS

The study posed minimum risk. Therefore, there was a need to be proactive and consider some of the possible ethical problems. Ethical clearance was granted by the Department of Management Accounting Research Ethics Committee of UNISA before commencing with the field work (Appendix I). The researcher sought for the consent of the research subjects to take part in the study.

The researcher drafted two consent letters, one for the participants to be used in the study and the other for owner/managers of MSMEs (see appendices J, K and L). The consent letter for participants sought for their consent to voluntarily take part in the study. The consent letters for owner/managers requested for permission to conduct study on the enterprises as well as their consent to take part in the study.

1.9 DELINEATION AND LIMITATIONS

The study focused on developing a performance measurement framework for formal retail MSMEs in developing countries, with MSMEs operating in Harare CBD, Zimbabwe as the focus. The study was confined to the CBD of Harare in order to minimise the cost of gathering data. The formal MSMEs included in the study were those in the retail sector specialising in clothing, groceries, furniture and electrical

gadgets. Formal MSMEs in this study are those incorporated as companies by the registrar of companies and registered for tax purpose by the tax authorities. The study did not include informal MSMEs such as those operating flea markets or any MSMEs operating from open spaces. The retail sector was chosen since the majority of MSMEs belong to this sector according to a survey carried out by the Finmark Trust on MSMEs in Zimbabwe (Block, 2013). The survey indicated that 45% of MSMEs are in the retail sector, 26% in agricultural activities, 8% in the manufacturing sector, 7% in the services sector, 3% in the mining sector, and 11% in other activities.

This study may have suffered from the following limitation: Some MSMEs may have given inaccurate information. This may be the case if they assumed that the researcher was investigating their operations. Most of the MSMEs seem to be scared of authorities specially tax authorities.

1.10 DEFINITION OF TERMS

Performance: is the ability to achieve results according to specific pre-determined objectives (Zeglat *et al.*, 2012).

A measure: is a metric that can be used for purposes of comparison and this comparison can be between the metric itself over time or against a pre-set target or against other metrics (Simons, 2000).

Micro-enterprise: A micro enterprise employs between one and ten employees (European Commission, 2003).

Small enterprise: employs between ten and fifty employees (European Commission, 2003).

Medium enterprise: An enterprise whose number of employees is above fifty but below two hundred and fifty (European Commission, 2003).

Survival of a business: It is the ability of a business to continue operating profitably for the foreseeable future (Own definition).

Formal MSME: MSMEs registered by the registrar of companies and tax authorities.

1.11 UNDERLYING ASSUMPTIONS

The differences in the chances of success or survival of the retail MSMEs can be explained by the differences in the MSMEs' approach and attitude towards performance measurement.

The owners of MSMEs included in the study have a goal to run profitable enterprises and create wealth for themselves.

1.12 SIGNIFICANCE OF THE STUDY

The study is likely to be important to a number of individuals and institutions.

Retail MSMEs: It is hoped that the study developed a suitable performance measurement framework which can be used by MSMEs in the retail sector in a developing country. The performance measurement framework may encourage the retail MSMEs to review their performance as well as plan for the future performance. The retail MSMEs that choose to use the proposed performance measurement framework may survive for a longer time. The survival of these MSMEs may be centred on the ability to identify those factors important for the survival of the enterprise, define performance measures, and plan for intended performance and monitor performance towards intended outcomes (Simpson *et al.*, 2012).

Government policy-makers: Survival of MSMEs is critical for the economies of developing countries since most people are employed by these enterprises (Block, 2013; Asah *et al.*, 2015; Isaga *et al.*, 2015; Massa *et al.*, 2015; Yazdanfar & Öhman, 2015; Gherhes *et al.*, 2016; Jitmaneeroj, 2016; Padachi & Bhiwajee, 2016; Valaei *et al.*, 2017). The indigenisation and empowerment policies being pursued by a number of developing countries are likely to result in a significant increase in the number of people forming their own businesses and operating as micro enterprises. Therefore, any study that seeks to enhance the survival of such enterprises should be welcomed.

Academics/Researchers: The study is likely to result in a theoretical contribution to the application of the concept of performance measurement in MSMEs. Most of the available literature focuses on performance measurement in large enterprises. Few studies have been carried out on performance measurement in MSMEs and there seems to be not much literature on performance measurement in MSMEs in the retail sector.

1.13 CHAPTER OVERVIEW

Chapter 1: Introduction

This chapter introduces the study. It looks at the concept of performance measurement, concept of business success, rational for the study, characteristics of MSMEs, criticism of available frameworks, evolution of performance measurement frameworks and proposed framework. It puts the study into perspective by providing the background to the study, research objectives, statement of the problem, and significance of the study, thesis statement and research methodology.

Chapter 2: Literature review

The chapter provides further literature on performance measurement systems and performance measurement frameworks. This chapter looked at definitions of performance, business performance, and performance measurement frameworks, theories guiding this study, performance measurement practices by the different disciplines, the strengths, and weaknesses of the common performance measurement frameworks.

Chapter 3: Literature review

An attempt is made in this chapter to determine the critical success factors, key performance indicators, and performance measures for the business performance of MSMEs as well as the existence of relationships between the identified critical success factors.

Chapter 4: Research methodology

The chapter looks at the research design adopted in this study and justification for adopting the research design. The target population and sample are defined and the sampling method described as well as its justification highlighted. The research instruments are discussed and the methods of administering the instruments described as well as justification for choosing particular methods. The analysis of the data is also described indicating the statistical tools used to analyse the data.

Chapter 5: Presentation and analysis of data gathered

Research findings are presented in the form of tables and figures in this chapter as well as data analysis using SPSS version 20 and Nvivo qualitative software.

Chapter 6: Presentation of the proposed performance measurement framework

The performance measurement framework which emerged from the study is presented in this chapter. Findings from theoretical testing of the framework through interviews with selected MSMEs using case study approach are presented. Shortcomings of the framework and improvements are also discussed.

Chapter 7: Summary, conclusion and recommendations

The major findings are summarised, conclusions drawn from the findings and recommendations proposed in this chapter. Future study is also indicated.

1.14 SUMMARY OF CHAPTER

The introductory chapter focused on the motivation for carrying out the study. It gave an overview of the study and set the tone for the study. The importance of MSMEs in both the developed and developing countries, including Zimbabwe was highlighted. The challenges faced by MSMEs in Zimbabwe were highlighted and were the motive behind the the carrying of this study. The concept of performance measurement was introduced and it was proposed that a performance measurement framework may enhance the performance and survival of MSMEs.

A brief critique of the available performance measurement frameworks was presented suggesting the need for designing a new performance measurement framework for MSMEs. The chapter also spelt out the objectives of the study and the delimitation, briefly indicating where the study was undertaken, how the study was done, and who participated. The next chapter presents further literature related to performance measurement.

CHAPTER TWO: LITERATURE REVIEW: PERFORMANCE MEASUREMENT

2.1 INTRODUCTION

In the previous introductory chapter an overview of the study was presented. The chapter highlighted the background to the study, articulating the importance of MSMEs in an economy, challenges confronting the MSMEs and the concept of performance measurement. The rationale for conducting the study as well as a brief outline of the research strategy is presented.

In the previous chapter, it was argued that performance measurement is essential for the success and survival of an enterprise (Cocca and Alberti, 2010; Srimai *et al.*, 2011; Gomes & Yasin, 2011; Taticchi *et al.*, 2012; Klovienė & Speziale, 2015; Gerba & Viswanadham, 2016; Sorooshian *et al.*, 2016). It was also argued that enterprises which measure their performance are more likely to meet their objectives (Zeglat *et al.*, 2012; Akpabot & Khan, 2015; Saunila, 2016) as the managers of such enterprises have a high chance of developing a sense of purpose (Srimai *et al.*, 2011; Taticchi *et al.*, 2012). There is also the assertion that it is difficult to improve something you cannot measure (Salaheldin, 2009; Van Looy & Shafagatova, 2016). The concept of performance measurement was not covered in detail in the introduction chapter. The purpose of this chapter is to present a more detailed extant literature review on performance measurement.

In Section 2.2 further definitions of performance, business performance, and performance measurement are explored. Section 2.3 looks at the concept of performance measurement from the accounting perspectives, marketing perspective, operations management perspective and supply chain perspective. Section 2.4 highlights the theories underpinning this study namely: the organisational theory, the goal theory, open system theory, and the stakeholder theory. Section 2.5 presents a summary of the most common performance measurement frameworks available in extant literature. The chapter concludes with a summary in Section 2.6.

2.2 DEFINITIONS

In this section definitions are presented in order to guide the reader on the study's standpoint on performance, business performance, and performance measurement.

2.2.1 Definition of Business performance

Business performance is a concept that is not easy to define as there are several definitions for it (Lebas & Euske, 2002; Achtenhagen, Naldi & Melin, 2010; Jamil & Mohamed, 2013; Blackburn *et al.*, 2013; Fisher *et al.*, 2014; Laukkanen *et al.*,2014; Gerba & Viswanadham, 2016; Wach *et al.*, 2016). Each enterprise has its own definition of business performance which depends on its context and objectives (Lebas & Euske, 2002; Wu, 2009; Wach *et al.*, 2016). Most authors define business performance as a measure of effectiveness and efficiency (Lebas & Euske, 2002; Alfaro *et al.*, 2007; Mitchell, Nielsen, Nørreklit & Nørreklit, 2013). Neely *et al.* (2002) define effectiveness as the extent to which the enterprise meets stakeholders' expectations and efficiency as the extent to which the enterprise utilises its resources in an economical way in order to meet the needs of its stakeholders. The enterprise's effectiveness can also be defined in terms of profitability and satisfaction of the needs of multiple stakeholders (Chakravarthy, 1986; Henri, 2004). Some of the definitions of business performance are:

- Doing today what will lead to an outcome of measured value tomorrow (Lebas & Euske, 2002)
- Managing the enterprise well and delivering value to stakeholders (Moullin, 2007)
- Using resources economically to achieve the enterprise's proposed objectives (Wu, 2009)
- Ability to create acceptable outcomes and actions (Chittithaworn, Slam, Keawchana & Yusuf, 2011).

The term performance is also used interchangeably with the terms success and growth (Gerba & Viswanadham, 2016). This study would, therefore, propose a working definition of performance as an enterprise's ability to meet its intended outcome in an effective and efficient manner, the intended outcome being to realise profit.

2.2.2 Definition of business performance

Business performance can be defined in terms of two perspectives namely: financial and non-financial perspectives (Kaplan & Norton, 1992; Wach *et al.*, 2016). Laukkanen *et al.* (2013) indicate that non-financial performance looks at brand

performance and market performance. Brand performance is measured by brand loyalty, brand image, brand awareness, and reputation (Wong & Merrilees, 2008). Market performance is measured by customer satisfaction, acquisition of new customers and retention of current customers (Laukkanen *et al.*, 2013). Financial performance can be defined in terms of business growth which is measured by change in turnover, increase in number of employees, increase in the enterprise's assets and profit (Blackburn *et al.*, 2013; Laukkanen *et al.*, 2013; Gerba & Viswanadham, 2016). Therefore, this study considers enterprise performance from the perspective of financial and non-financial performance variables identified in the literature review.

2.2.3 Definitions of measurement and performance measurement

Before defining performance measurement, it is necessary to define measurement. Measurement is defined as the assigning of arithmetical values such as words, symbols or figures to a phenomenon in such a way that the relationships of these values reflect the attributes of the phenomenon being measured (Pike & Roos, 2007). They also argue that a measurement is only a representation of the phenomenon being measured and is not the same as the phenomenon. Hence any conclusions on a study performance measurement should put this argument into consideration if any meaningful conclusions are to be drawn.

Performance measurement has as many definitions as the concept of performance itself. There is still a debate on the definition of performance measurement despite several studies which have been carried out on the subject (Wu, 2009; Gerba & Viswanadham, 2016).

The following are some of the definitions of performance measurement:

- Performance measurement means quantifying the input, output, or level of activity of an event or process (Radnor & Barnes, 2007).
- The process of quantifying the effectiveness and efficiency of past actions through acquisition, collation, sorting, analysis, interpretation and dissemination of appropriate data (Neely, 1999);
- Is evaluating how well an enterprise is managed and the value delivered to stakeholders (Moullin, 2007);

- A way of monitoring and maintaining an enterprise so that it achieves its objectives (Nanni, Dixon & Vollmann, 1990);
- An assessment of how an enterprise is progressing towards its objectives (Amaratunga & Baldry, 2002).

This study considers performance measurement as the activity of assigning arithmetical values such as words, symbols, or figures to an enterprise's financial and non-financial performance attributes.

The fact that there are several definitions for performance of an enterprise means that there are also several measures of performance. Blackburn *et al.* (2013) argue that the way performance is measured is very important since results will not be the same if a different measure such as employment, turnover, or profit is used. Cadogan (2012) indicates that attention should be paid to the choice of performance measures since different strategic orientation results in different domains of performance. In order to circumvent the above limitation, this study will adopt multiple measures of both financial and non-financial performance.

2.3 DIFFERENT DISCIPLINES' PERSPECTIVE OF PERFORMANCE MEASUREMENT

The concept of performance measurement has been a subject of study from as far back as the 1950s (Simon, Guetzkow, Kozmetsky & Tyndall, 1954). The study on this concept has even continued up to today (Bulak *et al.*, 2016; Gerba & Viswanadham, 2016; Pekkola *et al.*, 2016; Wach *et al.*, 2016; Van Looy & Shafagatova, 2016). The study on performance measurement has been done from different disciplines notably accounting, operations management, marketing, finance, economics, psychology, and sociology (Neely, 2007). This may suggest that all the functional units of an enterprise have an interest in the measurement of the enterprise's performance. Hence, there is a need for reviewing theoretical literature from all disciplines with a view of coming up with a holistic performance measurement framework acceptable to all the functional units of the enterprise (Henri, 2004). The next sub-sections look at performance measurement from the perspective of these different disciplines.

2.3.1 Business performance measurement from an accounting perspective

From an accounting standpoint business performance measures can be considered as financial measures and non-financial measures. The following sections discuss both financial and non-financial performance measurements from the perspective of the accountancy profession.

2.3.1.1 Financial measures of performance

Historically research on business performance by researchers from the accountancy discipline placed more emphasis on financial performance (Kaplan & Norton, 1992; Atkinson, Waterhouse & Wells, 1997; Henri, 2004; Halabi, Barrett & Dyt, 2010; Blackburn *et al.*, 2013; Gerba & Viswanadham, 2016; Maduekwe & Kamala, 2016). Financial performance measures have three main roles namely: being a tool for financial management, reporting to external stakeholders (debt holders and shareholders, suppliers, creditors) and for motivating and controlling activities of managers and employees (Otley, 2007).

Tools for financial management: Otley (2007) indicates that financial measures used as tools for financial management are:

- cash flow which is used in cash flow planning to meet short-term obligations;
- profitability which measure the balance between revenue and costs;
- return on assets which measure the efficiency and effectiveness of the enterprise's assets.

Financial ratios such as the current; quick; inventory to cost of sales; debtors to sales; and creditors to purchases measure an enterprise's cash flow and liquidity position (Otley, 2007). These measures together with the debt to equity ratio also measure the enterprise's financial risk (Hegazy & Hegazy, 2012). Another traditional measure of business performance is profitability. Profitability can be measured by earnings before interest and tax; profit after interest but before tax; and profit after tax (Otley, 2007; Hegazy & Hegazy, 2012; Williams & O'Donovan, 2015). The profitability (also called return) can also be expressed as a ratio of profit to capital employed, where capital employed is either just shareholders' equity or total capital used in the business (debt and equity) (Otley, 2007; Wu, 2009). The profit before interest and tax divided by total capital employed ratio would be used if the objective

is to assess the use of financial resources by the whole enterprise while the profit after interest and tax divided by total equity ratio will be more suitable for assessing the performance of shareholders' funds (Otley, 2007; Correia, Flynn, Uliana & Wormald, 2013). This may be an useful financial performance measure for MSMEs given that most of them have no access to external sources of finance and are, therefore, mainly financed by the owner's own resources (Otley, 2007).

The financial ratios allow finance managers to closely monitor the financial performance of the enterprise in relation to that of competitors or its own pre-set standards (Otley, 2007). However, what is clear, from studies on the role of financial ratios in financial management is that there is no one set of ratios which give a complete picture of the enterprise's business performance (Al-Matari *et al.*, 2014; Gerba & Viswanadham, 2016). The financial ratios should be used in combination in order to cover different aspects of the enterprise's performance (Otley, 2007, Simpson *et al.*, 2012). Although financial measures are very popular, they have received a fair share of criticism. These measures are criticised for measuring past performance rather than predicting future performance (Otley, 2007; Kaplan & Norton, 1992). Henri (2004) gives the following summary of the perceived limitations of financial performance measures:

- they are too historical and focus on the past,
- they cannot predict and explain future performance,
- their reward system focus on short-term performance,
- they may reward in appropriate behaviour,
- an action cannot be taken based on financial measures,
- they do not give timely signals,
- they are too aggregated and summarized such that they may not give meaningful guidance to managers,
- they do not give adequate guidance to evaluate intangible assets.

These perceived shortcomings of financial measures have led to the measurement of non-financial measures which are thought to be a better basis for predicting future performance (Otley, 2007; Gallani *et al.*, 2015). However, there are also proponents of use of financial measures in predicting future performance (Altman, 1968; Agarwal & Taffler, 2008). Altman (1968) for instance, proposed a Z-score model which is

based on financial ratios to predict bankruptcy and company failure and may, therefore, be useful in enhancing the success and survival of MSMEs. However, the feasibility of applying Altman's Z-score in MSMEs may be questionable as most of the MSMEs do not keep detailed financial statements. Detailed financial statements are a prerequisite for applying the Z-score model. The framework to be developed also needs to be very simple for it to have practical utility among MSMEs.

Tool for motivating and controlling: From an accounting perspective, performance measurement can promote motivation and control in the performance of managers or divisions where an enterprise has responsibility centres such as an investment; revenue; cost; and profit centre (Otley, 2001; Drury, 2004; Otley, 2007). Performance appraisal of each manager or division would be based on the output of the responsibility centre (Drury, 2004). However, there seem to be no consensus on the effectiveness of the use of financial performance measurement in motivating and controlling the activities of managers and employees of an enterprise. For example, Otley (2001) gives conflicting remarks when he argues that performance measures such as sales revenue, costs and profitability reflected in an enterprise's financial statements capture controllable aspects of business performance. On the other hand he argues that sales revenue, costs, and profitability are measures of outcome and cannot control performance. He advocates the measurement of activities that drive performance rather than the measurement of outcomes of performance. Therefore, the performance measurement framework meant to enhance the performance of an enterprise should focus on those activities and processes which have an impact on the performance of the enterprise.

2.3.1.2 Non-financial performance

The perceived shortcomings of financial measures led to a paradigm shift in the way performance is viewed and measured (Kaplan & Norton, 1992; Lebas & Euske, 2002; Meyer, 2002; Otley, 2007; Gerba & Viswanadham, 2016; Wach *et al.*, 2016). Kaplan and Norton's (1992) BSC opened a debate for the incorporation of non-financial performance measures in an enterprise's performance measurement framework. Some scholars argue that although financial measures are important in measuring the performance of an enterprise, non-financial measures like customer satisfaction, employee performance, employee turnover, operating efficiency, delivery time, and community and environmental factors should be included in

performance measurement (Chong, 2008; Forsman, 2008; Jayawarna *et al.*, 2011; Wach *et al.*, 2016). However, non-financial measures of performance have weaknesses as well. For example, they are prone to abuse by employees who may maximise individual performance at the expense of the enterprise's performance and they also fail to explain convincingly how the measures are related to profitability (Henri, 2004).

There is a seemingly acceptable view that there should be a balance between financial measures and non-financial measures (Kaplan & Norton, 1992; Henri, 2004; Otley, 2007; Wu, 2009; Gerba & Viswanadham, 2016; Wach *et al.*, 2016). Kaplan and Norton's (1992) BSC model made a notable breakthrough in incorporating non-financial performance measures in their four perspectives, namely: financial, customer, business process and innovation and learning (Garengo *et al.*, 2005; Biggart, Burney, Flanagan & Harden, 2010; Cocca & Alberti, 2010). The other popular performance measurement frameworks which incorporated non-financial measures are the European Foundation for Quality Management (EFQM), the performance prism, and the Results Determinant Framework (RDF). These frameworks are covered in Table 2.1.

2.3.1.3 Activity based performance measurement system

Enterprises should have a limited number of performance measures that focus on key activities and success factors (Meyer, 2002; Otley, 2007; Klovienė & Speziale, 2015; Pekkola et al., 2016). This is in line with Hope and Fraser's (2003) beyond budgeting philosophy which puts an emphasis on measuring and controlling only those current activities critical for the survival of the enterprise. Meyer (2002) argues that the enterprise should pursue activity based performance measurement which is concerned with finding activities that add value to the customer and results in the generation of revenue in excess of costs. Meyer's (2002) Activity Based Performance Measurement (ABPM) is based on Activity Based Costing (ABC) and what he calls Activity Based Revenue (ABR). ABPM breaks down the enterprise into its activities, identifies the costs incurred and revenue generated by each of these activities. In actual fact, activity based revenue is transaction based rather than activity based (Meyer, 2002). Therefore, it may be argued that there has been a paradigm shift in the way business performance is measured in the accountancy profession. Literature suggests that there is increasingly more emphasis on the

measurement of non-financial performance resulting in a balanced performance measurement (Chong, 2008; Forsman, 2008; Wu, 2009; Jayawarna *et al.*, 2011; Gerba & Viswanadham, 2016; Wach *et al.*, 2016).

2.3.2 Business performance measurement from a marketing perspective

The marketing arm of an enterprise is also interested in measuring the financial and non-financial performance of an enterprise. However, literature on performance measurement from the marketing discipline seems to suggest that the measurement of business performance of an enterprise is more inclined towards measurement of non-financial performance than financial performance. The most common non-financial performance measures related to customers identified in literature are customer loyalty; customer retention; market share; customer satisfaction; market position; customer relationship among others (Tan, 2007; Matanda & Ndubisi, 2009; Waweru & Spraakman, 2012; Azmat & Samaratunge, 2013; Wach *et al.*, 2016).

The marketing function has an effect on an enterprise's business performance since its activities influence customer reaction which may result in increased sales and profitability (Clark, 2007). Performance measurement should, therefore, focus on measuring the marketing activities; intermediate and final outcomes. With respect to marketing activities, performance measures ought to focus on activities related to the marketing mix namely, product, price, promotion, place, and after-sales service (Clark, 2002). Examples of intermediate outcomes are measures of customer awareness, customer satisfaction, customer preference, and customer liking (Ambler, 2003). Measures of final outcomes are sales or turnover, market share and profitability (Bonoma & Clark, 1988; Ambler & Riley, 2000; Blackburn *et al.*, 2013; Gerba & Viswanadham, 2016). However, sales revenue may not be a good output measure since it can be increased by reducing the price and this may have a negative effect on profitability (Clark, 2007).

The best output measure for marketing is profit, whether defined as total profit, profit margin or profit ratios such as return on assets, return on sales, and return on investment (Clark, 2002). Besides profit, cash flow is also an important output measure of marketing performance since it results from sales and sales promotions and contractual purchasing schemes (Srivastava, Shervani & Fahey, 1999; Blackburn *et al.*, 2013; Gerba & Viswanadham, 2016).

Measurement of performance from a marketing perspective may be important for the success and survival of an enterprise. This is evidenced by the existence of a customer perspective in most of the performance measurement frameworks available in literature. Moreover, customers are the ones who bring in revenue in the form of sales. Hence, there may be a need to measure the level of all the activities and processes which results in a sustainable relationship with customers.

2.3.3 Business performance measurement: The operations management perspective

The operations management arm of an enterprise also seems to focus more on non-financial performance than financial performance. It focuses mainly on quality, dependability, speed, flexibility, and cost (Neely, 2007; Fening, 2012; Kwamega, Li & Ntiamoah, 2015). Most studies carried out on performance measurement in operations management research tend to focus more on manufacturing enterprises (Neely, Gregory & Platts, 1995; Gosselin, 2005; Susilawati, Tan, Bell & Sarwar, 2013; Ahmad & Alaskari, 2014). This is reflected in the examples of performance measures for each of the above facet of performance measurement. The key features of each facet of performance measurement are briefly explained next.

Quality is defined as conformance to specifications (Neely, 2007). Examples of quality measures are number of defects and cost of quality. Cost of quality refers to costs of preventing defects, costs of assessing product quality and costs incurred if product is not of good quality (Campanella & Corcoran, 1983, Drury, 2004). Prevention costs are incurred in preventing production of a defective product and including costs of quality planning and training programmes. Costs of evaluating product quality include inspection costs, test and calibration control. Costs incurred where a defective product is produced are costs of rework, cost of processing customer complaints and customer returns (Neely, 2007).

The aspect of speed is concerned with the time taken to generate a quotation, deliver products to customers or the time taken to acquire goods and raw materials from suppliers (Fitzgerald, Johnson, Brignall, Silvestro & Vos, 1991; Neely, 2007; Afonso & Cabrita, 2015; Taschner, 2016). Speed is an important factor for those operating the just-in-time (JIT) manufacturing philosophy (Monden, 2011). The aspect of speed is related to that of dependability since dependability focuses on

delivery performance, schedule adherence, and ability to keep promises (Neely, 2007).

Measurement of costs in operation management focuses on the costs of activities. There is a very strong use of ABC which assumes that it is activities which consume costs and not products (Cooper & Kaplan, 1998; Drury, 2004; Neely, 2007). The operations management community embraces the concept of benchmarking whereby the performance of an enterprise is measured in relation to the performance of competitors (Neely, 2007; Afonso & Cabrita, 2015; Taschner, 2016).

Operations management involves the enterprise's management, evaluation and improvement of key processes in order to produce quality output (Talib, Ali & Idris, 2014; Van Looy & Shafagatova, 2016). Laitinen (2011) argues that in a scheme of business reorganisation, improving efficiency of business processes results in best performance in the long term. In order for MSMEs to succeed, there is a need for them to measure the most critical business processes (Alfaro *et al.*, 2007; Klovienė & Speziale, 2015; Pekkola *et al.*, 2016). Measuring the performance of a process makes its tracking possible and therefore, facilitates improvement where the performance of the process is found to be unacceptable (Ahmad *et al.*, 2015; Van Looy & Shafagatova, 2016). Thus, there is need for identifying performance measures useful in monitoring and controlling business processes and incorporating them into the performance measurement framework for retail enterprises.

Merely measuring the performance of a process does not necessarily result in an improvement in business performance (Hammer, 2007). There is need to follow such measurement with a course of action to improve the process and, therefore, business performance (Kohlbacher & Gruenwald, 2011; Van Looy & Shafagatova, 2016). Hammer (2007) argues that even the best-designed performance measures of a process will be useless if they do not initiate an action to improve the process and ultimately the performance of the business. It may, therefore, be argued that process measures are more critical than output measures since they are antecedents to output measures. The output depends on the process to the output (Buavaraporn & Tannock, 2013). Previous studies give suggestions on how a business process should be managed (Willaert, Van den Bergh, Willems, & Deschoolmeester, 2007; Nenadál, 2008; Kohlbacher & Gruenwald, 2011; Van Looy & Shafagatova, 2016). The following are highlights from these studies:

- Each process should have a person assigned and dedicated to it and such
 a person should be responsible and accountable for the performance
 measures of the process;
- The process owner should be someone with leadership qualities and should be a senior member of the management team;
- The process owner should have authority to manage and provide for the resources of the process in a manner he deems fit;
- The process indicators need to be derived from the process objective and the process objectives derived from business objectives which is also derived from the business strategy;
- The process performance measures (indicators) should initiate action to improve poor process performance and hence performance of the business.

It is plausible that there are many ways in which the business processes can be improved even for MSMEs. For example, Buavaraporn and Tannock (2013) and Kwamega *et al.* (2015) indicate that business processes can be improved by focusing on efficiency and reduction of costs. Improvement of a process should focus on cost, quality and customer satisfaction (Antony, Antony, Kumar & Cho, 2007; Fening, 2012; Ahmad & Alaskari, 2014; Kwamega *et al.*, 2015). For the retail sector there may be a need to focus on the dimensions related to customers' perception of service quality such as responsiveness, expectations, assurance, and empathy. Therefore, in this study, processes to be focused on are those that relates to management of costs, management of customers, management of suppliers and innovation.

It seems there is a close link between the operations management and the management accounting disciplines in terms of performance measurement. The two are concerned with the measurement of an enterprise's quality, efficiency, effectiveness and cost control. Although the measurement of performance from an operations management point of view may seem to apply to manufacturing enterprises only, it may be argued that it also applies to retail enterprises.

2.3.4 Business performance measurement: The supply chain management perspective

The management of the supply of inputs and outputs is very important for the success and survival of an enterprise (Liao & Barnes, 2015). Inputs in this regard may refer to inventory acquired from suppliers be it of raw material or finished goods. Output refers to goods sold to customers. Therefore, measurement of the efficiency and effectiveness of the flow of inventory between the supplier and the customer is by no doubt a prerequisite for the business performance of an enterprise (Afonso & Cabrita, 2015).

Supply chain management is concerned with managing relationships of participants in the supply chain process from suppliers of raw materials to consumers of the enterprise's products (Lambert & Knemeyer, 2007). The management of relationships with supply chain participants is explained next.

The supply chain participant to be considered first is the customer. An enterprise should strive to develop a relationship with its customers and maintain it. This can be done through identifying the enterprise's key customers and providing customised goods and services in order to develop customer loyalty (Lambert & Knemeyer, 2007; Azmat & Samaratunge, 2013; Hutchinson *et al.*, 2015). Related to customer relationship management is customer service management. This is concerned with identifying problems affecting or likely to affect the customer and solving them before the customer is affected (Lambert & Knemeyer, 2007).

An enterprise should manage its demand. Demand management involves matching demand and supply proactively so as to avoid costs associated with having excess inventory or shortage of inventory (Lambert & Knemeyer, 2007). The enterprise can use quantitative inventory control models such as economic order quantity (EOQ) and JIT purchasing in order to manage its demand for raw materials and finished goods (Drury, 2004). The enterprise can also manage its demand by adopting ABC where it will identify and cost activities that influence customer demand patterns (Lambert & Knemeyer, 2007). The other supply chain participant is the supplier. An enterprise should manage its relationship with suppliers (Lambert & Knemeyer, 2007). Supplier relationship management may be viewed as the other side of customer relationship management.

Although performance measurement has been looked at in this section from different perspectives, it is very unlikely that a MSME entity would have in existence all the above disciplines as separate specialist functions. Most MSMEs have few employees, with a flat organisational structure where either the owner or manager directs all activities (McAdam, 2000; Garengo et al., 2005; Nudurupati et al., 2011; Gherhes et al., 2016). Therefore, this study attempts to design a simple performance measurement framework which incorporates the standpoints of all the perspectives. Such a framework may be usable by owner/managers or other employees of MSMEs as it is likely to be suitable for an enterprise with few employees and departments and hence a flat organisational structure.

2.4 THEORIES UNDERPINNING THIS STUDY

The study is based on broad organisational theory and three other theories namely: goal theory, system theory and stakeholder theory. Each theory captures an important phenomenon of the enterprise in as far as performance measurement is concerned. The use of more than one theory in a single study where a single theory would not capture the phenomena under study is suggested by Henri (2004). Therefore, focusing on the three theories may result in a holistic performance measurement framework for an enterprise. Each of the three theories is explained next.

2.4.1 The organisational theory

The organisational theory views an organisation as a collection of individuals who act in unison together to achieve common organisational objectives (McAuley, Duberley & Johnson, 2007). The organisational theory is also concerned with studying the structure, functions, behaviour of individuals and performance of organisations with a view of understanding how the organisations should function and be managed (Pugh, 1984). Donaldson (1996) considers organisational theory as being concerned with the description, explanation, and prediction of members' behaviour in organisational settings. This study may, therefore, regard a MSME as an organisation which consists of individuals (the owner/manager and employees) who work together to achieve the enterprise's objective of wealth maximisation.

The organisational theory is criticised for assuming that all the members of the organisation work towards a common goal (Silverman, 1970; McAuley *et al.*, 2007).

Silverman (1970) argues that some members of an organisation may be working towards their own goals different from organisational goals and, therefore, talking of organisational goals would be giving a priority to the goals of other members, especially top management, at the expense of others. McAuley *et al.* (2007) further argue that different members of an organisation might have different conflicting goals which reflect their interests and needs. However, such a problem may not arise in MSMEs since they are normally owner managed and have very few employees or management structures making it possible for members to work towards the goal of the enterprise which is normally the same as that of the owner. Lastly, the organisational theory is criticised for not recognising that there are other members of the larger community external to the organisation but who have an influence on the organisation (McAuley *et al.*, 2007).

2.4.2 The goal theory

The goal theory considers the enterprise as a rational set of arrangements oriented toward the achievement of goals (Goodman & Pennings, 1977). The effectiveness of an enterprise is measured in terms of accomplishment of outcomes (Etzioni, 1960). Therefore, the focus is exclusively on the end that is the achievement of goals, objectives and targets (Henri, 2004). The goal theory assumes that an enterprise has ultimate goals that are well defined, few enough to be manageable, understandable and members of the enterprise have a general consensus on these goals, and progress toward these goals is measurable. The goal theory is however criticised for its assumption of a short-run perspective in the goals used to determine effectiveness (Hannan & Freeman, 1977; Ordóñez, Schweitzer, Galinsky & Bazerman, 2009).

2.4.3 Open system theory

The open system theory is premised on the idea that all human entities ranging from the individual to a huge enterprise can be viewed as a system interacting with its environment (Kleiner, 1986). The system in enterprises is divided into internal and external environments. The external environment consists of people outside the enterprise such as customers, competitors, and suppliers and the internal environment consists of internal people such as employees, managers and shareholders (Kleiner, 1986; Henri, 2004). There is an assumption that a boundary

exists between the system and its environment and that the system receives inputs from the environment, processes them, and releases them back to the environment as an output (Katz & Kahn, 1966; Robbins, 1990). Katz and Kahn (1966) further assert that there is a two-way relationship in which the environment is seen as affecting enterprises, and the enterprises are also seen as affecting the same environment. This study attempts to establish the existence of this relationship between the system and the environment in the context of performance measurement in MSMEs. Therefore, the performance measurement framework emerging from this study may need to attempt to measure the performance of the inputs, processes, and output elements of the open system.

2.4.4 Stakeholder theory

The stakeholder theory was first put forward by Freeman (1984) who argued that an enterprise should consider the interests of all the groups it relates to and not shareholders only. The stakeholder theory identifies employees, customers, suppliers, communities, government, trade unions, and providers of finance as other stakeholders of the enterprise other than shareholders (Freeman, 1984; Donaldson & Preston, 1995; Freeman, 2010; Miles, 2012). There is no consensus on the exact definition of stakeholders (Miles, 2012). However, extant literature highlights the need for retail enterprises to have a cordial and symbiotic relationship with their external stakeholders such as customers, suppliers and the government (Wong & Sohal, 2002; Staughton & Johnston, 2005; Yu, 2011; Hutchinson *et al.*, 2015) A performance measurement framework from the perspective of stakeholder theory may result in the enterprise meeting the needs of its entire stakeholder community in a way that enhances the performance of the entire enterprise. Therefore, stakeholder theory may be the backbone and hallmark of the performance measurement framework to be designed in this study.

2.5 A REVIEW OF EXISTING PERFORMANCE MEASUREMENT FRAMEWORKS

This section gives an overview of performance measurement frameworks which have contributed to the discipline of performance measurement for the period 1990 to 2016. Although there are many performance measurement frameworks which have been reported in literature, it seems that only a few of them have had an

impact. The impact of these performance measurement frameworks may be suggested by their prominence in the literature on performance measurement.

Table 2.1: A summary of performance measurement frameworks

Framework	Strengths	Weaknesses	Features to consider for current study
Results Determinant Framework (RDF) - Fitzgerald <i>et al.</i> (1991)	 Developed for service business industry; Attempts to measure lagging indicators of performance (results) and leading indicators of performance (determinants); Focuses on both external and internal factors; Integrates both financial and non-financial measures; Has a feed forward/feedback control system. 	 Is too general and, therefore, difficult to implement; Does not give examples of lagging and leading indicators. 	 Identification and measurement of leading indicators of performance (Performance indicators for critical success factors); Identification and measurement of output measures for each critical success factor; Measurement of both financial and non-financial performance; Inbuilt feed forward-feedback mechanism.
Balanced scorecard (BSC) - Kaplan and Norton (1992)	 Considers both financial and non-financial measures; Considers performance from four perspectives: financial, customer, internal business, and innovation and growth; Emphasises alignment of performance measurement system to the company's vision and strategy. 	 No specific guidelines for successful implementation; Leaves other stakeholders such as suppliers, regulators, community, pressure groups and competitors (Neely et al., 2001; Neely et al., 2005); Is more of a strategic management and monitoring tool than a performance 	 Considers both financial and non-financial measures; Measures performance based on critical success factors rather than BSC's four perspectives; Measures linked to the company's vision and strategy.

Framework	Strengths	Weaknesses	Features to consider for current study
		measurement system (Gomes, Yasin & Lisboa, 2004);	
		 Most enterprises regard the model as completed and would, therefore, not adopt it (Ittner, Larcker & Meyer, 2003); 	
		Only focuses on internal performance measurement and does not measure external environment. Measurement of external performance would be suitable for assessing competitiveness and benchmarking;	
		 Lacks rigor in the mapping of the means-end relationship (Otley1999). 	
The service-profit chain - Heskett, Jones, Loveman, Sasser, and Schlesinger (1994)	 Developed for the service sector; Considers frontline workers and customers; Attempts to show a cause-effect relationship between profitability, customer loyalty, employee 	Does not offer any specific suggestions for implementation (Taticchi & Balachandran, 2008).	More emphasis may be placed on performance measures related to frontline workers and customers since the performance measurement system is for retail industry;

Framework	Strengths	Weaknesses	Features to consider for current study
	satisfaction, and productivity.		Attempts to show a cause-effect relationship between financial and non-financial measures.
A Stakeholder Approach to Strategic Performance Measurement - Atkinson <i>et al.</i> (1997)	Considers the company's relationship with its stakeholders.		Considers the company's stakeholders.
The business excellence model - European Foundation for Quality Management (2003)	 Clearly highlights the five enablers of performance improvement and the results that need to be measured (Neely, 2007); The enablers of performance are: leadership, policy and strategy, people management, processes and resources; The performance results are people satisfaction, customer satisfaction, impact on society and business results; Considers stakeholders such as customers, ampleyees, partners. 	 Does not include competitors in stakeholder group; Some of their dimensions are not measurable (Neely et al., 2001). 	 Considers the MSMEs' critical success factors which includes among others owner/manager commitment, employee commitment, processes and resources; Considers the MSMEs' stakeholders; Considers both financial, and non-financial performance.
	 Considers stakeholders such as customers, employees, partners, suppliers, community, and 		

Framework	Strengths	Weaknesses	Features to consider for current study
	providers of finance.		
The action-profit linkage model - Epstein and Westbrook (2001)	 Suggests identification of actions inside a company that affects overall profitability; Suggests measurement of the key drivers of business success and profit; Suggests development of causal links between key drivers of performance and profitability; Focuses on main areas of an enterprise's business: company actions, delivered product/service, customer actions, and economic impact. 	 Lacks implementation guideline; Its practical usefulness has not been tested. 	 Identification and measurement of activities that consume costs and those which generate revenue; Development of causal links between critical success factors; Focuses on critical success factors.
The performance prism - Neely <i>et al.</i> (2001)	 Looks at performance measurement from several perspectives: stakeholder satisfaction, stakeholder contribution, strategies, processes and capabilities; Highlights external (stakeholder) and internal (strategy, process and capability) measures; Integrates financial and non- 	 Does not include competitors as stakeholders; Is difficult to implement (Wu, 2009); No feedback chain between results and performance drivers. 	 Consideration of all stakeholders; Indication of cause-effect relationships between stakeholders; Consideration of financial and non-financial measures.

Framework	Strengths	Weaknesses	Features to consider for current study
	financial measures;		
	Is derived from stakeholder satisfaction.		
The performance, development, growth benchmarking system - St-Pierre and Delisle (2006	 Focus on small and medium enterprises (SMEs); Treats performance measurement exclusively from a benchmarking point of view. 		Benchmarking the enterprise's performance with internally set targets and performance of competitors.

2.6 SUMMARY OF CHAPTER

This chapter looked at definitions of performance, business performance, performance measurement framework, and theories guiding this study. It was revealed that there is no consensus on the definition of performance. However, the study adopts a working definition of performance as the ability of an enterprise to meet its intended outcome in an effective and efficient manner. One of the intended outcomes is to operate profitably as a going concern. It was also revealed that although performance measurement has been looked at from different disciplines and perspectives, there are a lot of similarities.

The accounting discipline still places more emphasis on financial performance where it focuses on accounting ratios in order to measure business performance. However, of late the accounting discipline has increased attempt to include non-financial performance in the performance measurement matrix. The marketing discipline places the customer at the centre of performance measurement and emphasises more on customer related non-financial performance measures. The financial performance measures are regarded as output measures which are incidental to customer related non-financial performance. Operations management focuses on the measurement of the efficiency and effectiveness of internal processes while supply chain management at the flow of goods and services between the supplier and customer.

The performance measurement practices of different disciplines discussed in this chapter are related in one way or the other and, therefore, there is need to come up with a harmonised performance measurement framework which incorporates the perspectives of all the disciplines. The framework should regard an enterprise as an organisation with goals to be achieved while also meeting the needs of all stakeholders. The chapter also looked at the strengths and weaknesses of the common performance measurement frameworks with the aim of identifying the features of these frameworks which can be improved or adopted in the framework to be developed in this study. The next chapter looks at performance measurement from the context of MSMEs. It looks at characteristics of MSMEs, critical success factors, key performance indicators, and some of the performance measurement frameworks developed for MSMEs.

CHAPTER 3: PERFORMANCE MEASUREMENT IN MSMES

3.1 INTRODUCTION

In the previous chapter definitions of performance, business performance and performance measurement were presented. The chapter also explored the concept of performance measurement from the accounting perspective, marketing perspective, operations management perspective and supply chain perspective. The theories underpinning the study were revealed and the most prominent performance measurement frameworks presented.

The measurement of performance is crucial for the success of any enterprise irrespective of the size of the enterprise. As argued in the previous chapters, there seem to be limited performance measurement frameworks developed specifically for for MSMEs. There is also an argument that MSMEs are not a scaled down version of large enterprises. This chapter therefore, reviews available literature relating to performance measurement in MSMEs. Section 3.2 portrays the characteristics of MSMEs and Section 3.3 focuses on performance measurement frameworks for MSMEs. Section 3.4 identifies the critical success factors for the performance of MSMEs while Section 3.5 looks at the relationships between the critical success factors. Section 3.6 identifies the variables defining the critical success factors and Section 3.7 identifies the key performance indicators for each variavble defining the critical success factor. Section 3.8 identifies the research gaps and Section 3.9 brifiefly outlines the features of an ideal performance measurement framework. The conceptual framework is presented in Section 3.10. The chapter concludes with a summary in Section 3.11.

3.2 CHARACTERISTICS OF MSMES

Literature seems to point to the conclusion that most of the available performance measurement frameworks were developed for large enterprises and may, therefore, not apply to small enterprises (McAdam, 2000; Garengo *et al.*, 2005; Chong, 2008; Taticchi *et al.*, 2008; Taticchi *et al.*, 2010; Ahmad, & Alaskari, 2014; Zerfass & Winkler, 2016). One may argue whether the size of the enterprise matters. Does it make any difference whether a performance measurement system is designed for a large or a small enterprise? This section looks at the characteristics of MSMEs which

may have an influence on the development of a performance measurement framework.

3.2.1 The MSMEs' business environment

The business environment for MSMEs is highly unstable (Garengo *et al.*, 2005; Barrows & Neely, 2011; Pekkola *et al.*, 2016). The MSMEs have a reactive approach to the changes in the business environment (Hudson *et al.*, 2001; Garengo *et al.*, 2005; Cocca & Alberti, 2010; Nudurupati *et al.*, 2011; Pekkola *et al.*, 2016). This reactive approach is characterised by poor strategic planning (Ahmad *et al.*, 2015; Pekkola *et al.*, 2016) and an informal process of making decisions as well as short-term orientation (Garengo *et al.*, 2005). Hence, a performance measurement system for MSMEs may need to be flexible and able to incorporate the changes in the business environment.

3.2.2 The MSMEs' customer base

MSMEs have limited customers and are usually closer to these customers making it possible to develop more personal relationships with them (McAdam, 2000; Garengo et al., 2005; Hutchinson et al., 2015). This closer relationship with customers implies that there may be a need for designing a framework that maintains such relationships for a long time. This may promote long-term success of the enterprise. However, Hudson et al. (2001) argues that having limited customers may lead to unbeneficial relationships with the customers. They argue that the MSMEs become subservient to the customers, especially in an environment where the enterprises is facing stiff competition and relies on large enterprises for the marketing of its products. As a result, the MSMEs may not be able to negotiate more favourable terms of payment. It is, therefore, essential to consider the management of relationships with the customers when designing the performance measurement framework.

3.2.3 Affordable information technology

Most MSMEs lack information technology related resources (Garengo *et al.*, 2005; Middleton & Chambers, 2010; Bouazza, Ardjouman & Abada, 2015). The majority of MSMEs in Zimbabwe are still operating a manual system of recording, analysing, and storing data (Wadesango, 2015). A simple and easy to use performance measurement framework may help to better the situation. It is plausible that such a

framework may not depend on the extensive use of complex Information Technology resources as this renders it unusable to the MSMEs.

3.2.4 The MSMES informal and unplanned performance measurement

The major difference between MSMEs and larger enterprises is that MSMEs tend to have informal and unplanned measurements of performance, which often is not based on any pre-determined framework (Bourne, Mills, Wilcox, Neely & Platts, 2000; Klovienė & Speziale, 2015). Phillips and Shanka (2002) also argue that MSMEs by their nature are small, have very informal strategies and usually do not keep formal records. Most MSMEs are managed by owners who sometimes do not document their formal strategies (Sainidis, Gill & White, 2001). These MSMEs measure performance when they want to solve specific problems and the performance measurement system grows out of this need and is not a result of proper planning (Ates *et al.*, 2013). They continue to state that where there is planning the performance measurement is limited only to operational levels and strategic planning is often not considered. Therefore, there may be a need to carry out a baseline study to establish the situation on the ground with respect to performance measurement practices focusing mainly on selected retail MSMEs in Zimbabwe and to develop a framework which encourages strategic planning.

3.2.5 MSMEs focus on past activities

Finally, performance measurement in MSMEs usually focuses on past activities (Garengo *et al.*, 2005). However, measurement of past performance may not give information about future performance (Otley, 2002; Marcy, 2008). The characteristics of MSMEs discussed in this section may suggest that the performance measurement systems in MSMEs aim to gather information which supports the control function. It ignores the strategic planning function which focuses on the future and may be crucial for the success and survival of an enterprise.

3.3 CURRENT RESEARCH DONE ON PERFORMANCE MEASUREMENT FRAMEWORKS FOR MSMES

Literature indicates that a number of studies have been carried out on performance measurement. For example, a study by Neely (2005) through the technique of citation/co-citation analysis using Sitkis software on a dataset constructed using the ISI *Web of Science* database showed that there were 1,352 papers on performance

measurement published in 546 different journals between the period 1981 to 2005. Eighty four per cent (84%) of these journal articles were published since January 1995. Taticchi *et al.* (2010) replicated the citation/co-citation procedure carried out by Neely (2005) on a dataset constructed using the ISI *Web of knowledge* database in an attempt to update Neely's (2005) work. Taticchi *et al.* (2010) found that there were now 6,618 papers on performance measurement published in 546 different journals, the same number of journals as in Neely's (2005) study. Their citation/co-citation analysis considered papers published between 1970 and 2008 and 91% of the publications were as from January 1991.

It may appear that a significant number of papers considered by Taticchi *et al.* (2010) were published after Neely's (2005) study. This is based on the fact that the difference in the number of papers between the two studies is 5,266 papers, representing an increase of 390% papers. The studies on performance measurement seem to be continuing even after the last citation/co-citation analysis performed by Taticchi *et al.* (2010).

Taticchi et al. (2012) suggest that research on performance measurement in large enterprises seem to have reached maturity since the number has decreased in the last few years. The same authors point out that research on performance measurement in MSMEs is still immature. Their argument may be valid considering the increase in the number of researches on performance measurement in MSMEs noted in the literature.

Table 3.1 shows some of the frameworks which were developed to focus on performance measurement in MSMEs. Only those frameworks which apply to MSMEs were considered. Taticchi *et al.* (2010) suggest that most of the available performance measurement frameworks for MSMEs were adapted from frameworks originally developed for large enterprises. The framework which has been adapted the most is the BSC developed by Kaplan and Norton in 1992 (Neely, 2005; Taticchi *et al.*, 2010). Table 3.1 also indicates the strengths and weaknesses of the frameworks as well as what can be borrowed in developing the framework proposed by this study.

Table 3.1: A summary of performance measurement frameworks for MSMEs

Framework	Strengths	Weaknesses	Features to consider for current study
OPM®:a system for organisational performance measurement - (Chennell <i>et al.</i> 2000)	 Alignment of measurement with organisational strategy. Considers all the stakeholders of the enterprises except competitors. Considers measuring the inputs, processes, and outputs. 	 Has not been tested to ascertain its applicability to a number of MSMEs. Assumes that management in all enterprises has 3 levels: operational, tactical, and strategic. 	 Consider all stakeholders of the company including competitors. Performance measures may be classified as input measures, process measures and output measures.
Dynamic integrated performance measurement system - (Laitinen, 2002)	 Identifies the most important performance measures which should be evaluated in order to increase enterprises' performance. A general tool suitable for measuring and improving performance of an enterprise in any type of industry. 	 Absence of implementation guidelines. The results have not yet been validated. No alignment of measures with strategy is indicated. Does not consider stakeholders. 	Considering the critical success factors for the enterprise.
Integrated framework for SME Performance Measurement and Management Design - (Taticchi et al., 2008)	 The framework begins by identifying key processes, activities, and key performance drivers. Physical capabilities of the enterprise are considered. Provides for the implementation, 	 The interaction (relationships) among the five systems is not clear. It is not clear what constitutes the five sub-systems making the designing of the 	 Identification of critical success factors for MSMEs in the retail sector. Identification of key performance indicators for the critical success factors.

Framework	Strengths	Weaknesses	Features to consider for current study
	communication/ alignment, and review of the system. • Provides for benchmarking	framework difficult.	
	performance with performance of competitors.		
Computer-based performance	It is balanced, that is, considers financial and non-financial measures.	 Requires a robust information technology infrastructure. 	Development of a performance
measurement in SMEs - (Kueng et al., 2000)	SMEs have a ready to use performance measurement system in the form of the computer software package.	May be expensive for most MSMEs.	measurement framework which makes use of a simple information technology infrastructure.
	Performance indicators and measures are incorporated into the computer software packages making		 Consideration of financial and non-financial performance measures.
	data collection, analysis and reporting easier and fast.		Tailor made to suit the requirements of the retail
	 Can be tailored to suit specific needs of each MSME. 		sector.
Indicators for performance measurement in MSMEs - (Hvolby & Thorstenson, 2001)	 Performance measures are linked to strategy. 	 The framework still needs validation. 	 Identification of few critical success factors and key performance indicators for the retail sector.
	There are few non-financial indicators.	 The framework focused on MSMEs in the manufacturing sector only and may not apply to other sectors. 	

Framework	Strengths	Weaknesses	Features to consider for current study
Integrated performance measurement system - (Bititci, Carrie & McDevitt, 1997)	 The enterprise's performance measurement system is benchmarked against a reference model which will have been designed based on best industry practice. Allows for auditing of existing practice before proposing a new framework. Allows for feedback and continuous improvement of the system. 	Has no implementation guidelines.	Benchmarking the enterprise's performance with management set targets and competitors' performance.
The performance, development, growth benchmarking system - (St-Pierre & Delisle, 2006)	 Focus on small and medium enterprises (SMEs). Treats performance measurement exclusively from a benchmarking point of view. 	Concerned more with benchmarking and seem not to address other factors which influence the performance of an enterprise.	Consideration of benchmarking as part of continuous improvement.

The performance measurement framework to be developed in this study strives to avoid the weaknesses identified in Table 3.1 and attempt to capitalise on the identified strengths.

3.4 CRITICAL SUCCESS FACTORS FOR BUSINESS PERFORMANCE OF MSMES

Before attempting to highlight the critical success factors, it may be important to define the concepts of success and critical success factors. The definitions of these concepts are important in this study since they form the corner stones of the study. Thus, they put the current study into perspective.

3.4.1 Definition of success

Previous studies indicates that the definition of the term success in small businesses is not easy (Simpson, Tuck & Bellamy, 2004; Simpson *et al.*, 2012; Sarasvathy, Menon & Kuechle, 2013; Gerba & Viswanadham, 2016; Wach *et al.*, 2016). This may be due to the fact that success has a different meaning to different people and depends on the context of the person defining it. Simpson *et al.* (2004) and Simpson *et al.* (2012) indicate that the enterprise's success is defined by its growth and profitability. Watson, Nicholas, Watson, Hogarth-Scott and Wilson (1998) argue that a business is successful if it continues to trade profitably and is said to have failed if it ceases trading due to viability problems. However, this definition of success is criticised by Simpson *et al.* (2004) who argue that the decision to continue or cease trading may be influenced by other factors besides profitability and viability of the business. For example, previous studies indicate that an owner may cease operating a profitable enterprise if his her other non-financial objectives are not met (Green, Welsh & Dehler, 2003) or continue with unprofitable enterprise as long as other non-financial objectives are met (DeTienne *et al.*, 2008).

Success can also be defined in terms of a sense of achievement, recognition, job satisfaction, control and flexibility (Greenbank, 2001; Parker, 2009; Jayawarna *et al.*, 2011; Wach *et al.*, 2016). These aspirations may be social rather than economic in nature. This may be the case especially for MSMEs, where the objective of the owner is sometimes not to create wealth (Nieman & Nieuwenhuizen, 2009; Wach *et al.*, 2016). Entrepreneurs may start a business in order to become famous rather than to create wealth, or just to create employment for family members.

Lack of consensus on the definition of success among researchers makes the study of success in small enterprises difficult. The term success is interchanged with the terms performance and growth (Gerba & Viswanadham, 2016). Several meanings of success suggest that the best measure of success is as defined by the owner of the small business. For small business success to be relevant, an entrepreneur should define the success of his or her business and not an outsider (Simpson et al., 2004; Simpson et al., 2012; Gerba & Viswanadham, 2016; Wach et al., 2016). This suggests that a performance measurement framework may need to satisfy the aspirations of the owners and promote success as defined by the owners. However, this study defines success as measured by business growth, profitability and the ability of the MSME to continue operating. Net profit margin is used as a measure of success and number of years a MSME has been in operation as a measure of survival. Although authors such Fatoki (2014) indicate that data on the profitability of MSMEs is often not available, the situation is different for retail MSMEs operating in Zimbabwe because most of them are registered for tax and are required by law to keep their records for at least six years. The study assumes that the owners of MSMEs are rational investors whose business motive is to create and maximise their wealth.

3.4.2 Definition of critical success factors

The concept of a critical success factor was coined as long back as 1961 by Daniel and was made popular by Rockart in 1979 (Quesada & Gazo, 2007). Rockart (1979) defined critical success factors as the limited number of areas in which results, if they are successful, will ensure successful competitive performance for the enterprise. Oakland (2003) defines critical success factors as those elements which should be examined to ensure effective management and attainment of organisational goals. Masocha and Charamba (2014) furthermore highlights that a key success factor is anything which enables an enterprise to get business. Tracy (2007) mentions that each industry has its own success factors. Therefore, this study attempts to identify those critical success factors relevant to MSMEs in the retail sector.

Very few studies have been carried out in the last two decades to discover the key factors that can prevent enterprises from continual failure (Wild, 2010; Collett, Pandit & Saarikko, 2014). There is confusion about the factors and actions likely to facilitate

the success of enterprises (Liou & Smith, 2006; Laitinen, 2011; Parnell *et al.*, 2015). As of now it seems that no study has been carried out to conclusively provide the meaning of success to MSMEs entrepreneurs, despite the fact that previous studies spell out the importance of having valid measures of success (Ahmad, Wilson & Kummerow, 2011). Ahmad *et al* (2011) further argue that there is also no agreement on what constitutes the best measure of success. This study highlights some of the critical success factors which have an influence on the business performance of MSMEs and factors which are critical for the success of the performance measurement framework. To be considered first are factors critical to the performance of MSMEs.

3.4.3 Critical Success Factors (CSFs) for MSMES

Critical success factors for the MSMEs in this study refers to those conditions which need to be in place for the successful design and implementation of a performance measurement framework. A review of extant literature suggests that the success factors for the performance of MSMEs are commitment of the owner/managers and employees, business planning, innovation, and management of: information, revenue, costs, customers, suppliers, competitors, resources, regulators and sources of finance. Each of the CSFs is outlined in the following sections.

3.4.3.1 Commitment of the owner/manager in the running of the company

Research suggest that MSMEs which have a family CEO tend to report high return on assets and return on investment when compared to enterprises where the CEO is not a family member and this return is even reduced where the family CEO is not the founder (Hansson, Liljeblom & Martikainen, 2011). The owner of a business is likely to make decisions that result in long-term success and survival of the business, depending on the motivation for starting the business, whether he or she was pushed or pulled by certain factors (Asah et al., 2015). The management skills rather than technical skills (Asah et al., 2015; Bager, Jensen, Nielsen & Larsen, 2015) and the growth motivation of founders are very important and are the leading factors in the growth, success and survival of an enterprise (Feindt, Jeffcoate & Chappell, 2002; Halabi et al., 2010; Isaga et al., 2015; Gherhes et al., 2016). Therefore, the founder plays an important role in the performance of MSMEs. In addition to owner involvement, a lean management structure results in optimal performance in MSMEs

(Coles, Daniel & Naveen, 2008; Guest, 2009). A performance measurement framework will only be effective and successful if top management is committed to it (Turner, Bititci & Nudurupati, 2005; Amir, 2011).

Top management in MSMEs may refer to the owner of the MSME or manager or both. The owner/manager may have a clear picture of the business (Berko, Ashie & Kodjo, 2016). The owner or manager of the MSME is the agent of change and can influence behaviour of people who work for the enterprise so that their activities focus on the key stakeholders (Bassioni, Price & Hassan, 2005). The behaviour of the employees can be influenced through communicating the enterprise's strategy through relevant performance measures, training of employees responsible for implementing the framework (Berko *et al*, 2016; Padachi & Bhiwajee, 2016) and putting in place incentives in order to avoid resistance by the employees (Turner *et al.*, 2005; Watts & McNair-Connolly, 2012; Valaei & Rezaei, 2017). There may be a need to establish convincing performance measures in order for top management not to have a problem in accepting the performance measurement framework. Top management may not use any performance measures which they perceive to lack quality for decision-making purpose (Biggart *et al.*, 2010).

3.4.3.2 Employee commitment

Employee commitment is vital for the success and survival of any enterprise (Krüger & Rootman, 2010; Valaei & Rezaei, 2017). There is, therefore, a need for creating a business environment which promotes commitment of employees if MSMEs are to survive (Bosch, Tait & Venter, 2006). Owner/managers of MSMEs can promote employee commitment by listening to and supporting their employees, creating an environment which inspires employees to work hard, having an interest in each employee, not being negative, and appreciating each employee's work (Krüger & Rootman, 2010). Therefore, it may be argued that employee commitment is a hallmark of successful MSMEs.

The attributes of employee commitment identified in extant literature are employee participation in decision-making, autonomy, job satisfaction, level of employee motivation, employee loyalty, recognition, feedback, employee learning and professional growth (McKenna, 2005; Krüger & Rootman, 2010; Berko *et al*, 2016; Valaei & Rezaei, 2017). Failure to motivate employees leads to employee

dissatisfaction and low commitment resulting in undesirable outcomes such as absenteeism, high staff turnover, reporting for work late, lack of willingness to work overtime or go an extra mile, and generally low productivity (McKenna, 2005; Bartunek & Spreitzer, 2006; Hutchinson *et al.*, 2015). Therefore, the performance measurement framework to be designed in this study may need to factor in the element of employee commitment.

3.4.3.3 Business planning

Business planning is an important ingredient for any enterprise which seeks to succeed in its operations and MSMEs are not an exception (Ladzani, Smith & Pretorius, 2012; Blackburn et al., 2013; Uddin & Bose, 2013; Ahmad et al., 2015). There is evidence linking business planning in MSMEs to growth and ability to succeed and survive (Foreman-Peck, Makepeace & Morgan, 2006; Mazzarol, Reboud & Soutar, 2009). However, there is also an argument that strategic business planning is not feasible in MSMEs because of the volatile business environment in which most MSMEs operate (Pekkola et al., 2016). As a result most MSMEs shun formal planning (Parnell et al., 2015). Previous studies indicate the existence of a clear relationship between lack of planning by MSMEs and business failure (Jayawarna, Macpherson & Wilson, 2007). Planning enables the enterprise to develop, communicate, implement, and improve its strategy in order to achieve the enterprise's performance objectives (Talib et al., 2014). The business plan should focus on the needs of the enterprise's important stakeholders such as customers, suppliers, government regulators, employees, and the shareholders (Talib et al., 2014). Therefore, a performance measurement framework which does not incorporate elements of business planning may not be complete.

3.4.3.4 Management of information

Management of key and strategic information is very important for any enterprise's success and survival (Bengesi & Le Roux, 2014; Zerfass & Winkler, 2016). Management of market intelligence information makes it possible for MSMEs to explore new opportunities through innovation which focuses on processes, products and services (Keskin, 2006; Li & Zhou, 2010; Ndubisi & Iftikhar, 2012; Guo, Zhao & Tang, 2013). This innovation can only occur in an enterprise where everyone has easy access to information and where seeking, sharing and utilising new information

is encouraged and rewarded (Dobni, 2008). Thus, information may be an important ingredient in the quest to provide superior and competitive goods which meet or exceed customer satisfication.

There is need for the sharing of information between the company and its external stakeholders such as suppliers and customers (Zerfass & Winkler, 2016). For example, if manufacturers and retailers share information on market competition, market demand and customer preference, there is a very high chance that the market will be supplied with goods and services which meet customer needs and satisfaction (Lagrosen, 2005; McEvily & Marcus, 2005; Lin, Chen & Chiu, 2010; Bayraktar, 2015). Management of information may, therefore, be a component of a performance measurement framework which seeks to enhance the success and survival of retail MSMEs.

For performance measurement to be possible, an enterprise should have in place a mechanism for gathering and analysing performance measures (Turner, Bititci & Nudurupati, 2005). Lakhal, Pasin and Limam (2006) highlight that gathering and analysing information has an effect on business performance. Performance measurement may, therefore, be regarded as a component of information management (Turner *et al.*, 2005). However, information management systems for MSMEs should be simple since MSMEs lack adequate IT related resources needed for a complex information management system (Alattar, Kouhy & Innes, 2009).

3.4.3.5 Management of revenue

Revenue management is an area of management accounting which focuses on improving revenue and managing the enterprise's limited capacity in order to enhance the chances of long term survival (Ng, Harrison & Akroyd, 2013). This is done by offering an affordable product or service at the right time and which meets the needs of the customers (Ng *et al.*, 2013). This may be an appropriate way of increasing the MSMEs' profitability. MSMEs attach less importance to the management accounting role of co-ordination, control and accountability due to their small size and close control by the owner/manager (Otley, 2007).

The generation of revenue results in the improvement of the cash flow position for the enterprise (Ng *et al.*, 2013) and this is vital for its survival (Bhandari & Iyer, 2013). Revenue management involves collecting and analysing data to get

information on the trends, habits, and demand patterns of customers in order to assess customer profitability (Ng et al., 2013). They furthermore indicate that the revenue data is collected from point of sale systems, barcodes, and websites. The data is then analysed using management accounting techniques such as demand forecasting, linear programming, the BSC, cost-volume analysis and predictive budgets (Drury, 2004; Otley, 2007; Ng et al., 2013).

3.4.3.6 Management of costs

Cost management results in the efficient operation of the business. For example, cost cutting measures applied by a struggling company during a scheme of business reorganisation can result in performance improvement and, therefore, recovery of the business (Smith & Graves, 2005; Alfaro et al., 2007; Laitinen, 2011). Cost control is also considered a critical success factor by Feindt et al. (2002). Biggart et al. (2010) assert that one of the primary means of improving an enterprise's profitability is to control costs, mainly inventory, and store expenses. Inventory management will consist of managing shrinkage through in-store audits (Ng et al., 2013). This may likely be an important factor for MSMEs in the retail sector.

3.4.3.7 Innovation

Innovation is a requisite for sustainable long term business performance (Saunila, 2016). The success and survival of an enterprise depends on its innovation capability (Talke, Salomo & Kock, 2011; Al-Ansari, Pervan & Xu, 2013; Bulak *et al.*, 2016). There is an argument that innovation is a life blood of an enterprise's growth and survival as it is central in creating value and competitive advantage for the enterprise (Baregheh, Rowley & Sambrook, 2009). Studies established a positive relationship between business performance of MSMEs and the extent of innovation (Keskin, 2006; Otero-Neira, Lindman & Fernández, 2009; Forsman & Temel, 2011; Kotey, 2014). However, other researchers found a negative or no relationship between business performance and the level of innovation (Freel, 2000).

An innovative enterprise is one which constantly seeks new ideas that result in new products and ways of doing business (Shirokova, Vega & Sokolova, 2013). This may be critical for MSMEs considering that they face shortage of resources. Shirokova *et al* (2013) further argue that MSMEs need to develop new abilities, entrepreneurial orientation, entrepreneurial culture, and entrepreneurial mind-set in order to survive

and grow, especially when faced with constraint of resources. Masocha and Charamba (2014) identify constant innovation as a critical factor for MSMEs to successfully compete with large enterprises. They posit that this innovation should focus on marketing strategies, internal processes, and maximising delivery of customer benefits and satisfaction.

3.4.3.8 Management of customers

In order for an enterprise to become competitive and therefore succeed, it must improve customer service (Alfaro *et al.*, 2007). Most studies, if not all, on performance measurement have a customer perspective. This study has a unanimous view that customer management is a key factor in the business performance of enterprises. Therefore, the customer should be a key factor in performance measurement (Tucker & Pitt, 2009; Talib *et al.*, 2014).

Enterprises which have a successful growth usually have close contact with their customers and are committed to quality of products and services (Feindt *et al.*, 2002; Bulak *et al.*, 2016). The enterprise should develop a close and trusted relationship with its customers for it to achieve a higher performance (Azmat & Samaratunge, 2009; Azmat & Samaratunge, 2013; Shi & Yu, 2013) and this can be done through a process of networking (Taipale-Erävala, Heilmann & Lampela, 2014). Therefore, it is plausible that the importance of developing a relationship with customers can never be over emphasised.

Customer management should aim at developing customer loyalty and trust (Hutchinson *et al.*, 2015). Customer loyalty leads to customer retention which is critical for the success of any enterprise (Azmat & Samaratunge, 2013). A loyal customer always buys from the enterprise even if there are better alternative goods or services offered by the company's competitors (Hutchinson *et al.*, 2015). Therefore, the MSMEs should be customer focused and concentrate on satisfying customers so as to retain current customers and acquire new customers leading to higher market performance (Laukkanen *et al.*, 2014).

The owner-manager of a MSME may need to have a good knowledge of the market and industry being served by the enterprise. A positive interaction with customers result in MSMEs delivering goods and services which meet customer needs. For example, enterprises wishing to develop new products need to depend on customers

and market research in order to know customers' future needs (Taipale-Erävala et al., 2014).

3.4.3.9 Management of suppliers

A critical review of performance measurement frameworks seems to suggest that management of suppliers is not highlighted to a very large extent as a critical success factor for business performance in MSMEs. For example, the most common performance measurement frameworks, the BSC by Kaplan and Norton (1992) and the Results Determinant Framework by Fitzgerald *et al.*, (1991) do not consider suppliers in their perspectives. Supplier management is one of the important drivers of financial performance (Quesada & Gazo, 2007; Rajagopal, 2010; Shi & Yu, 2013). Enterprises should develop a relationship with their suppliers for them to achieve a competitive advantage and long term organisational performance (Temtime & Solomon, 2002; Tari, Molina & Castejon, 2007; Talib *et al.*, 2014; Bulak *et al.*, 2016).

3.4.3.10 Management of competitors

Management of the enterprise's competitors is necessary for the success and long term survival of the enterprise (Miles, 2012). Hence, enterprises should not focus on their customers only but should place equal importance on their competitors as well if they are to gain competitive advantage in the business environment (Matanda & Ndubisi, 2009). Management of competitors by the enterprises involves knowledge of who the competitors are and their business operations (Masocha & Charamba: 2014). The enterprise should aim to offer unique and better products than competitors if it is to survive in the market place (Nieman & Nieuwenhuizen, 2009). Masocha and Charamba (2014) further argue that the enterprise should identify the weaknesses and gaps left by the competitor and capitalise on these weaknesses and gaps. Therefore, a performance measurement framework for MSMEs may also need to factor in to some extent the performance of the MSMEs' competitors.

The performance of competitors might be factored into the performance measurement framework for MSMEs through benchmarking (Taschner, 2016). Tucker and Pitt (2009) view benchmarking as a process of searching the industry's best practice against which the enterprise's performance will be measured (Tucker & Pitt, 2009; Taschner, 2016). In simple terms, benchmarking implies that the enterprise compares its performance to that of its competitors (Amir, 2011).

Benchmarking is very important since a fundamental requirement of an enterprise's business growth is having a better performance in relation to competitors (Laukkanen *et al.*, 2013).

Benchmarking can be internal or external (Hegazy & Hegazy, 2012). External benchmarking is when the enterprise compares its performance to external standards, which are the best practice for the industry whereas internal benchmarking is when the enterprise compares its performance against its own standards which are set by the management (Hegazy & Hegazy, 2012; Laukkanen et al., 2013). Tucker and Pitt (2009) argue that only external benchmarking results in sustainable competitive advantage and high performance. In addition to benchmarking, MSMEs should also network with their competitors and share knowledge, information and other resources (Bayraktar, 2015; Gunawan, Jacob & Duysters, 2016). Internal benchmarking is based on the enterprise's own perceptions which may not reflect the market conditions and, therefore, may not lead to customer satisfaction and superior business performance (Tucker & Pitt, 2009). Thus, management of competitors entails creating a beneficial long term relationship with competitors rather than perceiving them as enemies.

3.4.3.11 The enterprise's pool of resources

The resource-based theory suggests that the performance and growth of an enterprise is driven by the resources possessed by that enterprise (Atristain & Rajagopa, 2010; Barney, Ketchen & Wright, 2011; Hsu, Tan, Laosirihongthong & Leong, 2011; Tan, Smyrnios & Xiong, 2014; Yazdanfar & Öhman, 2015). A company's capability depends to a greater extent on its pool of tangible and intangible assets (Ratnatunga, Gray & Balachandran, 2004). These resources are financial, physical, human, organisational, and technological. Therefore, the performance of enterprises in the same industry is different because of the differences in the resources and capabilities they possess (Kohlbacher & Gruenwald, 2011; Shirokova *et al.*, 2013).

Previous studies indicate that in order for an enterprise to be competitive and hence successful, there is a need for it to acquire unique resources which cannot be replicated or substituted by competitors (Caldeira & Ward, 2003; Edelman, Brush & Manolova, 2005; Davidsson, Achtenhagen & Naldi, 2007; Blackburn *et al.*, 2013;

Shirokova *et al.*, 2013; Shi & Yu, 2013; Kotey, 2014). However, it is important to compare the MSME's performance to its physical capability since most MSMEs have limited resources which can be the cause for poor performance (Taticchi & Balachandran, 2008).

Lack of resources is often cited as one of the major causes of poor business performance and, therefore, failure of MSMEs (Kohlbacher & Gruenwald, 2011; Ratnatunga *et al.*, 2004; Shirokova *et al.*, 2013). This seems to be an over generalisation. It is not only availability of resources which is important for success and growth of businesses, but how these resources are used as well (Shirokova *et al.*, 2013). Two or more MSMEs may have the same set of tangible resources and operate under the same external environment but produce different business performance (Ratnatunga *et al.*, 2004). The importance of resources varies among MSMEs and depends on the enterprise's goals (Tan *et al.*, 2014). Researchers should, therefore, be interested in knowing which resources have the greatest impact on the performance of an enterprise and how they have an influence on the performance.

A review of the literature seems to point out that intangible resources are the most important and unique resources of any enterprise. Ratnatunga *et al.* (2004) found that enterprises which paid more attention to soft or intangible resources were more successful than those which did not. Examples of soft or intangible resources are employees, knowledge and skills, a strong business base, reputation and business relationships, brand equity (Ratnatunga *et al.*, 2004; Kotey, 2014). Previous studies highlight that knowledge based intangible resources such as know-how, technologies, patents and licenses, qualified personnel and professional managers are the most important resources which drive the performance of an enterprise (Andersén, 2010, Shirokova *et al.*, 2013: 179; Kotey, 2014). These knowledge based resources can be acquired through training, research and development and continuous organisational learning (Shirokova *et al.*, 2013). Intangible resources could not be imitated and, therefore, give an enterprise a competitive advantage over its competitors.

A number of studies highlight the positive effect of a learning culture on enterprise performance (Wang, 2008; Tan *et al.*, 2014). It may be argued that an enterprise which pays particular attention to knowledge based resources conforms to Kaplan

and Norton's (1992) learning and growth perspective. For example, the ability of management stands out as a resource factor on its own. This is since owner/managers are the ones who put together scarce resources and their ability to do so efficiently and effectively determine the success of an enterprise (Kelliher & Reinl, 2009; Mazzarol *et al.*, 2009; Blackburn *et al.*, 2013; Ramukumba, 2014). Thus, the enterprise's pool of resources may be regarded as a critical success factor.

3.4.3.12 Conformance to regulations

MSMEs may need to conform to regulatory authorities in order for them to succeed in their business endeavours (Jitmaneeroj, 2016). Examples of regulatory authorities are government departments like tax authorities, standards setting, and monitoring boards, environment monitoring boards and local authorities. A considerable number of MSMEs in Zimbabwe face closure every year when the Zimbabwe Revenue Authority fines them heavily for failing to comply with various tax laws of the country (Utaumire, Mashiri & Mazhindu; 2013; Nyamwanza, Mavhiki, Mapetere, & Nyamwanza, 2014). Therefore, compliance to the country's trade regulations could ensure that an enterprise avoids unnecessary penalties and operate profitably leading to its long term success.

3.4.3.13 Management of sources of finance

Non-availability of finance is always cited as one of the reasons contributing to the failure of MSMEs (Olawale & Garwe, 2010; Masocha & Charamba, 2014; Ramukumba, 2014). The fact that MSMEs cannot easily get finance from financial institutions (Ramukumba, 2014) means that MSMEs should establish good relationships with their suppliers so as to get goods on credit (Ramukumba, 2014). Thus, it is plausible that a performance measurement framework should identify the drivers of this relationship with suppliers and measure the extent of the relationship. The measurement of the extent of the relationship may enable MSMEs to monitor the relationship from time to time for the benefit of the enterprise.

Some argue that lack of finance is not one of the major causes of failure of MSMEs (Robb & Fairlie, 2008). Mere access to financial resources may not be enough condition for success of an enterprise. The financial resources may need to be utilised effectively and efficiently in order to result in a successful enterprise. Some MSMEs with adequate resources have often been found to misuse those resources

leading to failure of the enterprise (Stokes & Wilson, 2006; Ramukumba, 2014). Masocha and Charamba (2014) found that foreign owned MSMEs in South Africa performed better than local MSMEs despite the fact that local MSMEs had better access to financial resources than MSMEs owned by foreigners. Hence the argument for a shift in focus from challenges relating to lack of financial resources to viability of the business, entrepreneurial abilities of the owner/managers and use of modern management techniques to enhance performance and survival of MSMEs (Ramukumba, 2014).

3.4.3.14 Management of profit measures

Historically, most MSMEs assessed their performance based on level of profit (Kaplan & Norton, 1992; Atkinson et al., 1997; Henri, 2004; Halabi et al., 2010). Profit measures are used as tools for motivating and controlling the performance of divisions, managers and employees so that everyone in the company channels his or her energy towards achieving the organisational goals (Otley, 2001; Drury, 2004; Otley, 2007). Therefore, performance appraisal of each manager or division may be based on the output of the responsibility centre (Drury, 2004). However, there seem to be no consensus on the effectiveness of the use of profit measures to motivate and control the activities of managers and employees of an enterprise. For example, Otley (2001) gives conflicting remarks when he argues that financial performance measures such as profitability reflected in an enterprise's financial statements capture controllable aspects of business performance. On the other hand he argues that profitability is a measure of outcome and cannot control performance. He advocates for measurement of activities that drive performance rather than measurement of outcomes of performance. Some researchers also argue that profitability measures may not be regarded as critical success factors as they assess past performance rather than predicting future performance (Kaplan & Norton, 1992; Otley, 2007). Thus, a performance measurement framework developed to enhance the success and survival of an enterprise may focus more on other measures other than profit.

3.5 RELATIONSHIPS BETWEEN THE CRITICAL SUCCESS FACTORS

One of the objectives of the study was to investigate the relationships between the extents of measurement of the critical success factors. This was done in order to

have a better understanding of how extent of measurement of one factor is related to the extent of measurement of the other factors. The researcher did not find literature which gives evidence of existence of the relationship between the extents of measurement of the critical success factors. However, the researcher found literature suggesting existence of relationships between the levels of some of the critical success factors and not extent of measurement of the factors. Available literature also suggests existence of relationships between the success factors and business performance (Liou & Smith, 2006; Wild, 2010; Laitinen, 2011; Collett *et al.*, 2014). The following sections expound literature which points to the existence of relationships between the levels of different critical success factors but not the extent of measurement of the critical success factors.

3.5.1 Owner/manager commitment and employee commitment

Extant literature seems to suggest that the commitment of employees is related to that of owner/managers. Owner/manager commitment indicators are involvement in the running of the business, entrepreneurial orientation (risk taking behaviour), provision of resources, support of continuous learning for owner/manager and employees, employee empowerment and owner/manager involvement of employees (Ling, Qing & Shen, 2014; Ntalianis, Dyer & Vandenberghe, 2015). The employee commitment indicators are employee participation in decision-making, autonomy, job satisfaction, employee loyalty, employee learning and professional growth (McKenna, 2005; Krüger & Rootman, 2010; Ntalianis *et al.*, 2015).

The owner/manager's level of motivation has a positive influence on the employees' motivation (Carneiro, 2008). If employees become unmotivated, dissatisfaction and low levels of commitment will result (Krüger & Rootman, 2010). This will lead to several problems, such as high staff turnover, poor attendance, sub-optimal productivity, reluctance to work overtime, and not reporting for work on time (Macleod, 1999).

Since employee commitment and satisfaction are essential for the success and survival of any enterprise, managers should ensure that their employees are always satisfied and committed to the enterprise (Krüger & Rootman, 2010; Ntalianis *et al.*, 2015). This can be achieved by the owner/manager's commitment to affording employees a good working condition, flexibility and autonomy, participation in

decision-making, recognising employees' effort and giving them feedback (McKenna, 2005; Bosch *et al.*, 2006; Ireland, Hoskisson & Hitt, 2009; Krüger & Rootman, 2010; Ntalianis *et al.*, 2015). The owner/managers should not criticise employees who make mistakes in pursuant of innovation, but should support all the efforts to be innovative (Ndubisi & Iftikhar, 2012).

The owner/managers can foster employee commitment by being committed to empower employees through training, autonomy, involvement in decision-making and flexible work practices (Michailova, 2002; Carless, 2004; Walker & Brown, 2004; Schjoedt, 2009). Although training is very expensive for the company, the impact of training in promoting employee commitment is undisputedly immeasurable (Meyer & Smith, 2000; Bartlett, 2001; Ling *et al.*, 2014). Therefore, there are several means by which owner/managers can empower employees resulting in high levels of employee commitment.

3.5.2 Owner/manager commitment and business planning

Business planning is a phenomenon that has a positive influence on the performance of an enterprise (Richbell, Watts & Wardle, 2006; Mazzarol *et al.*, 2009; Blackburn *et al.*, 2013). However, some researchers question the contribution of business planning on the performance of an enterprise (Bridge, O'Neill & Cromie, 1998). Literature also suggests that owner/managers have an influence on the ability of an enterprise to make business plans (Mumford, Scott, Gaddis & Strange, 2002). These business plans often reflect the owner/manager's expectations, experience, personality, values, inborn and acquired skills, and know-how (Castanias & Helfat, 2001; Hambrick, 2007; Guo *et al.*, 2013).

3.5.3 Employee commitment and business planning

The attributes of employee commitment such as participation in decision-making, autonomy, and flexible working conditions imply that employees should be involved in business planning (McKenna, 2005). Involving employees who are committed to the enterprise in business planning enhances the chances of the employees to work towards the achievement of the enterprise's aspirations, goals and vision (Krüger & Rootman, 2010). Hence some authorities argue that it is essential for owner/managers to consult their employees when crafting business plans and making decisions so as to foster employee participation (Krüger & Rootman, 2010).

3.5.4 Management of information and business planning

Information is a pre-requisite for business planning. Previous studies have revealed that those MSMEs which have the capacity to gather information required for planning and developing new products, processes and services have higher chances of growing and surviving than those which do not have such capacity (Georgellis, Joyce & Woods, 2000). Successful MSMEs gather and keep information pertaining to future product possibilities, and use it to generate, evaluate, and exploit ideas at the opportune time and in a manner that is profitable to the enterprise (Koudal & Coleman, 2005). In order to come up with a business plan that meets the enterprise's strategic goals, there is need for the availability of information on customers, suppliers, competitors and other relevant stakeholders (Keskin, 2006; Ndubisi & Iftikhar, 2012; Guo *et al.*, 2013). Therefore, it may be argued that an attempt at business planning without crucial information is likely to be futile.

3.5.5 Business planning and innovation

It is argued that planning is a pre-requisite for innovation (Panayides, 2006). This is further emphasised by Loewe and Chen (2007) who posits that innovation does not result from luck or the visionary leader's geniusness but from proper planning. Furthermore, planned innovation is crucial to the success and survival of MSMEs (Mumford, Hunter & Bedell- Avers, 2008). This viewpoint was highlighted long back by Martensen and Dahlgaard (1999) who postulated that enterprises should develop new products based on detailed planning rather than reacting to market conditions as doing so will not result in a synergy between research and development, marketing and production. Innovation is also too risky in MSMEs and, therefore, its success depends on the ability of the MSMEs to plan ahead, (Georgellis *et al.*, 2000) and their willingness to take risks (Panayides, 2006).

Views from previous studies that the capacity to plan ahead fosters new products and services among MSMEs, suggests the existence of a relationship between planning and innovation. There are, however, critiques of existence of a relationship between planning and innovation. Their argument is that most innovation is detected by market needs rather than being a product of the enterprise's planning (Kamoche & e Cunha, 2001; Abraham, 2013).

3.5.6 Innovation and enterprise resources

The relationship between innovation and the level of resources possessed by MSMEs is not clear (Keskin, 2006). That is, is the level of innovation of a MSME related to the level of the enterprise's resources? Some argue that for successful innovation to take place in an enterprise, there is need for abundant resources (Ndubisi & Iftikhar, 2012). Owner/managers' commitment to effectively, efficiently and economically manage and allocate resources is closely related to the enterprise's innovation (Guo *et al.*, 2013). This is also in line with the resource based view which maintains that the performance and growth of an enterprise is driven by the resources possessed by that enterprise (Barney *et al.*, 2011; Tan *et al.*, 2014).

On the contrary, some studies suggest lack of evidence of a positive relationship between the level of innovation and level of resources. The argument is that most MSMEs have limited resources and the need for and level of innovation in these small enterprises increases as the resources possessed decreases (Keizer, Dijkstra & Halman, 2002; Keskin, 2006; Damanpour, Walker & Avellaneda, 2009).

3.5.7 Innovation and management of external stakeholders

Although the positive effect of innovation on business performance is undisputable, it is not clear how innovation interacts with other factors in improving the enterprise's performance (Hult, Hurley & Knight, 2004; Panayides, 2006). It is suggested that an enterprise's innovation initiatives need to focus on the enterprise's external stakeholders if they are to steer the enterprise towards success and sustainable growth (Loewe & Chen, 2007; Bstieler, 2005; Li, Zhou & Si, 2010; Laforet, 2011). The enterprise's external stakeholders are customers, suppliers, competitors, providers of finance and regulators. The possible interaction between innovation and each external stakeholder is now expounded next.

Some authors have an opinion that product and process innovation results in the development of new products and services which meet customers' needs and satisfaction (Loewe & Chen, 2007; Laforet, 2011; Baregheh, Rowley, Sambrook & Davies, 2012). The supplier is another very important stakeholder for an enterprise. The enterprise needs to be innovative in nurturing a sustainable relationship with its suppliers so that it enjoys an uninterruptible supply of inventory in an economic and profitable manner (Koudal & Coleman, 2005; Loewe & Chen, 2007; Laforet, 2011). A

supplier can also provide creative solutions to an enterprise's problems rather than supplying goods and services only (Georgellis *et al.*, 2000).

One of the challenges faced by struggling MSMEs in the retail sector in Zimbabwe is the competition they face from large retail enterprises (Chikweche, 2015). In order to survive, MSMEs should be innovative and develop products and services which appeal to the market more than those of their competitors (Nieman & Nieuwenhuizen, 2009; Baregheh *et al.*, 2012). The MSMEs should be innovative and develop products and services which are difficult to replicate thereby setting high barriers for competitors who wish to service the same market (Ndubisi & Iftikhar, 2012). Development of such innovative products can only be possible if the retail MSMEs scans the business environment and closely monitor the activities of the competitors focusing on their strengths and weakness, and success and failures (Keskin, 2006). It may, therefore, be argued that innovation is crucial in managing competition.

Management of regulators is one of the factors that have an influence on the success and survival of MSMEs. For example, failure to engage tax authorities when facing financial problems and being not in a position to meet tax obligations always results in the demise of most MSMEs in Zimbabwe (Utaumire *et al.*, 2013). Therefore, an enterprise should develop an innovative relationship with its regulators so as to reduce compliance costs. There is also need for MSMEs to be innovative and establish different strategies of accessing credit from various stakeholders (Ramukumba, 2014). As mentioned before, non-availability of finance is the most common factor which militate against the success and survival of most MSMEs (Olawale & Garwe, 2010; Masocha & Charamba, 2014; Ramukumba, 2014).

3.5.8 Enterprise resources and management of customers

The products and services offered to the market by an enterprise depend on the resources possessed by the enterprise (Shi & Yu, 2013; Kotey, 2014). As argued before, an enterprise needs to be innovative so that it delivers goods and services that meet the needs of customers if it is to survive (Talke *et al.*, 2011; Al-Ansari *et al.*, 2013; Masocha & Charamba; 2014). Resources, in terms of financial, human, tangible, and intangible assets are a pre-requisite for the supply of goods and services to the market (Hsu *et al.*, 2011).

3.5.9 Management of revenue and management of customers

An enterprise that meets the needs of its customers is likely to report high sales (Feindt *et al.*, 2002; Azmat & Samaratunge, 2013; Shi & Yu, 2013; Laukkanen *et al.*, 2014). Managing customers by carrying out market research in order to identify and supply goods and services which meet market requirement, having customer care and after sale support services result in customer loyalty and sustainable business for the enterprise (Ng *et al.*, 2013). It may, therefore, be argued that an increase in number of customers should imply an increase in volume of sales.

3.5.10 Management of revenue and management of competitors

An enterprise that manages its competitors is likely to report high sales (Miles, 2012). Managing competitors by carrying out market research in order to identify and supply goods which are in high demand in the market is likely to result in increased sales revenue (Nieman & Nieuwenhuizen, 2009; Masocha & Charamba, 2014). It may, therefore, be argued that an increase in management of competitors may result in an increase in volume of sales.

3.5.11 Management of suppliers and management of costs

From a procurement perspective it is imperative for an enterprise to develop cordial relationship with its suppliers (Lambert & Knemeyer, 2007). The enterprise should manage the costs of procuring goods and services from its suppliers (Lambert & Knemeyer, 2007). These costs relate to ordering and storage of the goods. The enterprise's procurement and stores functions are some of the major cost centres (Drury, 2004). Hence, the need may exist for designing procurement and inventory management policies that results in optimal acquisition of inventory from suppliers.

3.5.12 Management of regulators and management of cost

An enterprise should monitor and manage the costs of complying with various regulations. Some of the regulations which need to be complied with are those relating to payment of tax, council fees and licenses, costs of membership to industry associations and standard setting boards. For example, most MSMEs in Zimbabwe face high tax compliance costs and this has a negative effect on their performance and survival (Utaumire *et al.*, 2013). Studies also indicate that a considerable number of MSMEs in Zimbabwe face closure every year when the Zimbabwe

Revenue Authority fines them heavily for failing to comply with various tax laws of the country (Utaumire *et al.*, 2013; Nyamwanza *et al.*, 2014).

3.5.13 Sources of finance and management of costs

As mentioned before, access to cheaper sources of finance is one of the critical factors for the performance and survival of MSMEs (Olawale & Garwe, 2010; Masocha & Charamba, 2014; Ramukumba, 2014). It is documented that the challenge faced by most MSMEs is the high cost of borrowing which results in high cost of doing business posing a threat to their survival (Mabhungu, Masamha, Mhazo, Jaravaza & Chiriseri, 2011). It is, therefore, important for MSMEs in the retail sector to pay attention to costs of various sources of finance so as to minimise the cost of doing business and hence enhance the success and survival of the enterprise.

3.6 VARIABLES DEFINING THE CRITICAL SUCCESS FACTORS

In order to measure the critical success factors for MSMEs, it is essential to identify the variables that define these critical success factors. The critical success factors expounded in Section 3.4 are constructs that are not easy to define and measure. This section, therefore, attempts to identify those variables which when combined, can give an estimate measure of each critical success factor. The variables which define these critical success factors can be regarded as either non-financial or financial.

Table 3.2 gives a summary of variables identified from extant literature which are presumed to define the respective critical success factors for the retail MSMEs. The various sources of the information are also highlighted.

Table 3.2: Summary of variables defining the critical success factors

Critical Success Factor	Variables defining the critical success factor	Sources
Commitment of owner/manager	 Level of involvement in running the business; Level of involvement in decision-making; Entrepreneurial orientation; Growth aspirations and motivation; Support of continuous learning for owner/manager and employees. 	Papadaki & Chami, (2002); Biggart et al. (2010); Box (2007); Uddin & Bose (2013); Waweru & Spraakman (2012); Blackburn et al. (2013); Hansen & Hamilton (2011); Tan et al. (2014); Psomas, Fotopoulos & Kafetzopoulos (2010)
Commitment of employees	 Employee empowerment; Employee involvement in decision-making; Job satisfaction; Loyalty among staff Staff training. 	Talib et al. (2014); Simpson et al. (2004); Shirokova & Yezhova (2012); Psomas et al. (2010)
Business planning	 Availability of a business plan; Availability of a strategic plan; Communication of the business plan and strategic plan through-out the enterprise. 	Uddin & Bose (2013); Blackburn <i>et al.</i> (2013); Mazzarol <i>et al.</i> (2009); Waweru & Spraakman (2012)

Critical Success Factor	Variables defining the critical success factor	Sources
Management of information	 Record keeping; Information technology infrastructure; Gathering, processing and storage of data; Performance measurement; Benchmarking. 	Talib et al. (2014)
Management of revenue	 Increase in revenue; Managing limited resources; Collection of revenue data; Analysis of revenue data. 	Ng et al. (2013)
Management of costs	 Inventory control; Reduction of operating costs; Reduction of transaction costs; Reduction of cost of customer to access products. 	Biggart <i>et al.</i> (2010); Waweru & Spraakman (2012); Shi & Yu (2013); Quesada & Gazo (2007); Psomas <i>et al.</i> (2010)
Innovation	 Development of new unique products and services; New ways of doing things; Focusing on new abilities; 	Shi & Yu (2013); Shirokova <i>et al.</i> (2013); Covin & Lumpkin (2011)

Critical Success Factor	Variables defining the critical success factor	Sources
	 Entrepreneurial orientation and entrepreneurial culture. 	
Management of business Processes	 Improvement of business efficiency; Enhancing quality of service; Responsiveness; Flexibility; Minimisation of transaction costs; Minimisation of purchasing costs. 	Buavaraporn & Tannock (2013); Shi & Yu (2013); Waweru & Spraakman (2012)
Management of customers	 Customer focus; Customer loyalty; Customer retention; Market share; Customer satisfaction; Market reputation of the enterprise; Long term customer relationship; Market position; Customer base; Customer service; Identification of customer needs and 	Azmat & Samaratunge (2013); Ali, Rehman, Yilmaz, Nazir & Ali (2010); Waweru & Spraakman (2012); Pinho (2008); Quesada & Gazo (2007); Psomas et al. (2010); Tan (2007); Mokhtar, Yusoff & Ahmad, 2014; Matanda & Ndubisi (2009)

Critical Success Factor	Variables defining the critical success factor	Sources	
	expectations;		
	 Market responsiveness; 		
	 Generating market intelligence information on present and future customer needs; 		
	 Dissemination of market intelligence information throughout the enterprise. 		
Management of suppliers	Relationship with supplier.	Tari et al. (2007); Temtime & Solomon (2002)	
Management of competitors	 Knowledge of the enterprise's competitors; 	Tucker & Pitt (2009); Psomas et al. (2010 Mokhtar et al., (2014); Masocha & Charamb	
	 Knowledge of the competitor's business; 	(2014)	
	 Taking advantages of the competitor's weaknesses; 		
	Existence of external benchmarking;		
	 Changes based on external benchmarking; 		
	 Gathering market intelligence information on competitor activities. 		
Enterprise's resources	Access to unique resources;	Tan et al. (2014); Frank, Kessler, Mitterer &	
 Intangible resources such as knowledge, reputation, 	Learning orientation and culture;	Weismeier-Sammer (2012); Talib <i>et al.</i> (2014); Shirokova & Yezhova, (2012)	

Critical Success Factor	Variables defining the critical success factor	Sources
service delivery, relationships, employees, strong business base. • Tangible resources	 Research and development activities; Recruitment of quality staff. 	
Conformance to regulations	 Tax compliance; Compliance to city bi-laws; Compliance to professional bodies and industry associations; Compliance to monitoring bodies such as standards setting board, environment management laws. 	Utaumire et al., (2013); Nyamwanza et al. (2014)
Management of sources of Finance	Contributed by owner;Gained through profits and cash flows;Credit from suppliers.	Simpson et al. (2004); Ramukumba (2014); Mabhungu et al. (2011)

The performance measurement framework designed in this study is based partly on the critical success factors and variables identified in Table 3.2 and performance measurement best practices identified from the empirical study. The variables presented in Table 3.2 are operationalised in Table 3.3 presented in Section 3.7.

3.7 KEY PERFORMANCE INDICATORS FOR THE VARIABLES DEFINING CRITICAL SUCCESS FACTORS

In the context of performance measurement, a key performance measure refers to the collection of data that is used to assess the performance of an enterprise following a specific parameter key to the success of a business (Hegazy & Hegazy, 2012). The Key Performance Indictors (KPIs) should focus on the critical aspects of the business enterprise whose performance is being measured (Hegazy & Hegazy, 2012). Therefore, identifying KPIs would be very important for MSMEs since they often lack the resources and sometimes expertise to define and measure key performances indicators.

Small enterprises should focus on measuring only KPIs which reveal the state of affairs of the enterprise (Hegazy & Hegazy, 2012; Watts & McNair-Connolly, 2012). A selection of the right KPIs is very crucial since these measures guide the enterprises' activities (Amir, 2011). The enterprises' activities may be guided when owner/managers of MSMEs make use of the information provided by the KPIs for making decisions.

An effective performance measurement system should not have merely a list of KPIs but should show the relationship between the KPIs as well as how they influence the business enterprise's success (Taticchi & Balachandran, 2008). Some studies argue that KPIs should provide feed-forward information which can help managers to be proactive and take corrective action before an adverse result is produced (Amir, 2011; Bhandari & Iyer, 2013). Those in support of KPIs which provide feed-forward information argue that measures which provide feedback are not useful as they tend to be backward looking. Such measures are said to focus on past performance and as such do not inform on future performance. A case in point is a financial performance measure such as profit (Kaplan & Norton, 1992; Hegazy & Hegazy, 2012; Al-Matari *et al.*, 2014). It may, however, be argued that KPIs which provide feedback are as equally important as those which provide feed-forward information.

Feedback information which is based on past actual performance is reliable and likely to be objective. Such backward looking information can be used to make a forecast of future performance making use of techniques such as trend analysis (Hegazy & Hegazy, 2012).

Although literature has support for forward-looking performance measures, such measures have limitations as well (Otley, 2007). For example, such measures are likely to be very subjective as it is not easy to measure with certainty the performance of a future event (Otley, 2007; Yu, 2013). Examples of forward looking measures are Tobin's Q, Market Value Added (MVA), and Market-to-book value (MTBV) (Al-Matari *et al.*, 2014). These measures are based on shareholders' expectations regarding future performance. Use of such measures is likely to be a more difficult task for MSMEs. Therefore, this study is in support of performance measures which provide both feedback and feed-forward information. The following sections focuses on some of the key performance indicators of financial and non-financial performance.

Financial performance of an enterprise is often measured by profitability, sales growth, market share, level of debt (Ahmad & Seet, 2009) as well as cash flow and ratio analysis (Halabi *et al.*, 2010). Financial measures which are key to success of an enterprise are the current ratio, quick ratio, times interest earned, gearing, accounts receivable turnover, average collection period, inventory turnover, gross profit margin, net profit margin, return on investment (ROI), return on assets (ROA), return on equity (ROE), earnings per share (EPS), dividend yield, price-earnings, return on sales, return on capital employed, and inventory repurchases (Hegazy & Hegazy, 2012; Al-Matari *et al.*, 2014).

• **Net operating cash flow:** Net operating cash flow is one of the key financial performance measures of an enterprise. The old saying "Cash is King" (Otley, 2007) is more appropriate for MSMEs than large businesses because it is the life blood of the MSMEs. Bhandari and Iyer (2013) argue that cash and not accounting income, is very important since it is the one which buys things, pays debt, pays salaries and wages and pays bills among other things. If cash is inadequate, an enterprise will fail to meet its obligations resulting in bankruptcy (Bhandari & Iyer, 2013). A positive net

operating cash flow may be an indication that the business is operating profitably and is, therefore, viable.

The most documented reason for financial distress and failure of MSMEs is shortage of cash (Simpson *et al.*, 2004; Mabhungu *et al.*, 2011; Bhandari & Iyer, 2013; Ramukumba, 2014). This may suggest that the performance measurement framework for MSMEs should consider net operating cash flow as one of the key financial performance measures. Therefore, financial performance ratios based on net operating cash flows should be calculated to predict business failure. Bhandari and Iyer (2013:669) suggest that the following measures should be calculated:

- operating cash flow (OCF) divided by current liabilities (CL) (OCF/CL) measures the enterprise's liquidity;
- cash flow coverage of interest (INT) (OCF + INT + Tax/INT) measures
 the enterprise's ability to service interest obligation on debt;
- operating cash flow margin (OCF/Sales) measures the ability of the enterprise to translate sales into cash. It is an appropriate measure of operating profitability and liquidity. It also uses one profitability measure unlike traditional profit margin which is based on several measures of profitability. Traditional profit margin has four different measures depending on whether the profit used in the calculation is gross profit, operating profit, Earning Before Interest and Tax (EBIT), or net profit;
- operating cash flow return on total assets (OCF/Asset) measures the ability of the enterprise's assets to generate cash;
- earning quality (EBIT/OCF) is a measure of the quality of the earnings. A
 value below 1 signals financial difficulties ahead;
- quick ratio or acid-test ratio (CA-INV)/CL this is a traditional measure of liquidity and a lower value implies that the enterprise is likely to be under distress. However, it assumes that enterprises keep books of accounts and prepare proper financial statements. This is often not the case with some MSMEs (Danes, Loy & Stafford, 2008; Halabi et al., 2010; Ng et al., 2013) and, therefore, the use of ratio analysis may be a problem.
- Sales volume growth: Sales volume growth may be the most obvious key
 performance indicator for a successful and profitable enterprise. Many
 companies improve profitability through increase in sales volume (Biggart

- et al., 2010; Shirokova et al., 2013). Shirokova et al. (2013) argue that sales growth gives a better estimate of small business's growth than profit measures.
- Profitability measures: Profit is the most common financial performance measure used to assess the performance of business enterprises despite its well documented limitations (Kaplan & Norton, 1992; Henri, 2004; Otley, 2007; Ahmad & Seet, 2009). The measurement of performance in terms of profit is also prescribed by accountancy profession which give guidelines on how financial statements should be prepared for external reporting to shareholders and other interested parties (Otley, 2007). Hence, there is much bias towards profitability measures of performance despite the loud call from performance measurement researchers for enterprises to balance financial and non-financial measures (Marcy, 2008).

Table 3.3 outlines the KPIs of each variable defining each critical success factor. The KPIs for the variables were identified from extant literature and the source of the literature is highlighted.

Table 3.3: Performance indicators of the variables

Critical Success Factor (Construct)	Variables	Key Performance Indicator measures	Source
	Owner/manager involvement in running the business	Time spent in conducting the enterprise's business affairs.	Lewis, Pun & Lalla (2007)
	Owner/manager involvement in decision-making	Level of decision-making; Impact of decisions made.	O'Regan, Sims & Ghobadian (2005)
	Entrepreneurial orientation	Level of growth; Level of risk taken.	Papadaki & Chami (2002); Shirokova <i>et al.</i> (2013)
	Provision of resources	Amount of resources put into business.	Papadaki & Chami (2002)
Commitment of owner/manager	Growth aspirations and motivation	Level of profit from business; Market share; Level of independence.	Papadaki & Chami (2002)
	Support of continuous learning for owner/manager and employees	Number of workshops/seminars attended by owner/managers per any given period; Number of employees trained per any given period.	Jayawarna <i>et al.</i> (2007); Panagiotakopoulos (2011)
	Employee involvement	Number of feedback meetings per given period; Number of key decisions made by	Shepherd & Mathews (2000); Ntalianis <i>et al.</i> (2015); Wong Humborstad & Perry (2011);

Critical Success Factor (Construct)	Variables	Key Performance Indicator measures	Source
		employees per given period; Number of training programmes initiated by employees.	Krüger & Rootman (2010); Shirokova <i>et al.</i> (2013); Ntalianis <i>et al.</i> (2015)
	Job/employee satisfaction	Level of staff morale; Level of staff motivation; Willingness to have unpaid overtime.	Suriyankietkaew & Avery, (2014); Shepherd & Mathews (2000); Wong Humborstad & Perry (2011); Krüger & Rootman (2010)
	Employee engagement	Level of employee satisfaction.	Suriyankietkaew & Avery, (2014); Wong Humborstad & Perry (2011)
Commitment of employees	Loyalty among staff	Level of absenteeism from work; Level of willingness to go an extra mile; Level of staff turnover; Level of performance related incentives.	Shepherd & Mathews, (2000); Ntalianis <i>et al.</i> (2015)
	Staff training	Number of short courses attended by the employees.	Jayawarna et al. (2007)
	Employee empowerment	Number of training and education programmes per given period; Level of participation in decision-making.	Jayawarna <i>et al.</i> (2007); Krüger & Rootman (2010); Wong Humborstad & Perry, (2011); Ntalianis <i>et al.</i> (2015)

Critical Success Factor (Construct)	Variables	Key Performance Indicator measures	Source
	Marketing plan	Number of marketing plan meetings/sessions held per given period.	Keskin (2006); Blackburn <i>et al.</i> (2013)
Business planning	Availability of a strategic plan	Number of strategic planning meetings/sessions held.	O'Regan <i>et al.</i> (2007); Blackburn <i>et al.</i> (2013)
	Financial planning	Number of budget meetings/sessions per given period.	Drury (2004); Otley (2007); Agarwal & Taffler (2008)
	Generating market intelligence information on present and future customer needs	Number of market researches carried out per given period.	Lancaster and Velden (2004); Mokhtar <i>et al.</i> (2014); Matanda & Ndubisi (2009)
Management of information	Dissemination of market intelligence information throughout the enterprise	Number of circulars disseminating market intelligence information; Number of meetings where market intelligent information is disseminated.	Lancaster & Velden (2004); Mokhtar <i>et al.</i> (2014); Matanda & Ndubisi (2009)
	Gathering market intelligence information on competitor activities	Competitors' market share per given period; Competitors' fast moving goods per given period; Competitors' slow moving goods per given period.	Matanda & Ndubisi (2009)

Critical Success Factor (Construct)	Variables	Key Performance Indicator measures	Source
Management of revenue	Increase in revenue	Percentage increase in sales; Percentage increase in selling price.	Al-Matari <i>et al.</i> (2014); Waweru & Spraakman (2012); Ng <i>et al.</i> , (2013); Hsu <i>et al.</i> (2011); Shirokova <i>et al.</i> (2013)
Management of costs	Inventory control	Percentage of inventory pilferage per given period; Percentage of inventory which gets bad from each batch of inventory purchases; Level of cost of holding inventory; Level of ordering costs.	Watts & McNair-Connolly (2012); Ng et al., (2013); Taticchi et al. (2008); Biggart et al. (2010)
	Reduction of operating costs	Level of operating costs.	Alfaro et al. (2007); Yu (2011)
	Reduction of transaction costs	Level of cost of discounts offered to customers; Level of discount forgone from suppliers.	Krambia-Kapardis & Ioannou (2011)
Innovation	Supply of new unique products and services	Number of new products introduced into the market per given period; Number of products supplied in new tailor made company packaging; Percentage of revenue from products introduced per given period.	Baregheh et al. (2012); Hristov & Reynolds, (2015); Saunila, Pekkola, & Ukko (2014); Löfsten (2014); Li et al. (2010); Baregheh et al., (2012); McAdam, Reid & Mitchell (2010); Abraham, (2013); Lin et al. (2010);

Critical Success Factor (Construct)	Variables	Key Performance Indicator measures	Source
			Baregheh et al. (2009)
	Focusing on new abilities	Number of new skills developed per given period.	Johannessen (2013); Hristov & Reynolds (2015); Saunila <i>et al.</i> (2014); Csath (2012); McAdam <i>et al.</i> (2010); Lin, Chen & Kuan-Shun Chiu (2010); Baregheh <i>et al.</i> (2009)
	New ways of doing things	Number of new ways of operating per given period.	Johannessen, (2013); Hristov & Reynolds, (2015); Saunila <i>et al.</i> (2014); Csath (2012); Baregheh <i>et al.</i> , (2012); McAdam <i>et al.</i> (2010); Lin <i>et al.</i> (2010); Baregheh <i>et al.</i> (2009)
	Research and development	Level of expenditure on research and development per given period.	Laforet, (2011); Shirokova <i>et al.</i> (2013); Löfsten (2014); Loewe & Chen (2007)
	Customer focus	Number of exercises per given period to monitor changes in customer needs.	Lin <i>et al.</i> (2010)
Management of customers		Number of customer surveys per given period to get feedback from customers.	Lin et al. (2010); Taipale-Erävala et al. (2014)
	Customer loyalty	Number of repeat purchases from	Azmat & Samaratunge (2013); Laukkanen <i>et al.</i> (2014);

Critical Success Factor (Construct)	Variables	Key Performance Indicator measures	Source
		customers per given period.	Fernández-González & Prado, (2007); Marcy (2008)
	Customer retention	Number of regular customers lost per given period.	Ahmad & Seet (2009); Azmat & Samaratunge (2013); Laukkanen et al. (2014); Fernández-González & Prado (2007)
	Market share	Increase in sales volume per product per given period; Number of new customers per given period.	Waweru & Spraakman (2012); Hegazy & Hegazy (2012); Yu (2011); Ramukumba (2014)
	Customer satisfaction	Level of suggestions from customers; Number of customer complaints per given period.	Sousa & Aspinwall (2010)
	Market reputation of the enterprise	Number of customers referred to the company by other customers or potential customers at any given time.	Ahmad <i>et al.</i> , (2011); Yu (2011)
	Long term customer relationship	Number of years a customer has been buying from the company.	Azmat & Samaratunge (2013); Laukkanen <i>et al.</i> (2014)
	Market position	The company's position relative to competitors,	Lin <i>et al.</i> (2010); Laukkanen <i>et al.</i> (2014)
	Customer base	Number of customers per given period;	Waweru & Spraakman (2012)

Critical Success Factor (Construct)	Variables	Key Performance Indicator measures	Source
		Number of customers per full time employee.	
	Customer service	Average number of after sale support services per customer per given period.	Waweru & Spraakman (2012)
	Market responsiveness	Number of changes made in response to changes in the market.	Tucker & Pitt (2009)
	Relationship with supplier	Number of meetings held with suppliers per given period.	Hmad <i>et al.</i> (2011)
Management of	Willingness of supplier to sell goods on credit	Percentage of credit sales per given period.	Tari <i>et al</i> . (2007)
suppliers	Delivery period	Average time taken by supplier to deliver goods after placing an order.	Talib <i>et al.</i> (2014: 156)
	Discounts received	Level of discounts received.	Tari et al. (2007)
Management of competitors	Knowledge of the enterprise's competitors	Number of competitors per given period; Number of new entrants per given period; Number of exits per given period.	Hegazy & Hegazy (2012); Mashocha & Charamba (2014)
·	Knowledge of the competitor's business	Competitors' product range per given time.	Hegazy & Hegazy (2012); Laukkanen <i>et al.</i> (2014)

Critical Success Factor (Construct)	Variables	Key Performance Indicator measures	Source
	Taking advantages of the competitor's weaknesses	Extent to which the company takes advantage of the competitors' weaknesses.	Hegazy & Hegazy (2012); Mashocha & Charamba (2014)
	Existence of external benchmarking	Number of exercises to compare the enterprise's activities with those of best performing competitor enterprises.	
	Changes based on external benchmarking	Number of changes effected as a result of the company's benchmarking activities at any given period.	Hegazy & Hegazy (2012); Taticchi <i>et al.</i> (2008); Mashocha & Charamba (2014)
Enterprise resources	Intangible resources	Level of goodwill/reputation per given period.	Atristain & Rajagopal (2010); Wong & Merrilees (2008); Inmyxai & Takahashi (2009); Tan et al. (2014); Shirokova et al. (2013); Kotey (2014)
	Tangible resources	Level of key tangible assets per given period.	Atristain & Rajagopal (2010); Inmyxai & Takahashi (2009); Shirokova <i>et al.</i> (2013); Kotey (2014)
	Human resources	Number of key employees per given period.	Atristain & Rajagopal (2010); Inmyxai & Takahashi (2009);

Critical Success Factor (Construct)	Variables	Key Performance Indicator measures	Source
			Kotey (2014)
	Financial resources	Level of invested capital per given period	Atristain & Rajagopal (2010); Inmyxai & Takahashi (2009); Shirokova <i>et al.</i> (2013)
Conformance to regulations	Tax compliance	Number of times the company is penalised by tax authorities;	(own proposition)
		Number of times the company pays tax due by the due date.	
	Compliance to city council by- laws	Number of times the company is penalised by city authorities;	(own proposition)
		Number of times the company pays licence fees by the due date.	
	Compliance to monitoring bodies such as government, standards setting board, environment management laws.	Number of times the company is penalised by a monitoring board.	(own proposition)
	Compliance to industry associations	Number of industry associations the enterprise is a member of.	(own proposition)
Management of sources of	Contributed by owner	Percentage of finance contributed by	Inmyxai & Takahashi (2009); Simpson <i>et al.</i> (2004);

Critical Success Factor (Construct)	Variables	Key Performance Indicator measures	Source
Finance		owners.	Ramukumba (2014)
	Retained profits	Percentage of finance from retained earnings.	Inmyxai & Takahashi (2009); Simpson <i>et al.</i> (2004)
	Credit from suppliers.	Number of times the enterprise is penalised for late payment of credit;	(own proposition)
		Level of early settlement discounts received from suppliers;	
		Percentage of inventory acquired on credit at any given period.	
	Loans	Number of times the enterprise fail to pay interest on time;	Inmyxai & Takahashi (2009); Ramukumba (2014)
		Percentage of loan finance at any given period.	

The operationalisation of the variables defining the CSFs presented in Table 3.3 is an important part of this study. The KPIs presented in Table 3.3 are key elements of the performance measurement framework designed in the study.

3.8 KNOWLEDGE GAPS

The review of literature has identified the following knowledge gaps:

- There is no consensus among researchers on the most ideal performance measurement framework in general and more specifically for MSMEs.
- None of the performance measurement frameworks reviewed seems to propose the performance measurement of MSMEs in the retail sector from the perspective of their CSFs.
- There seem not to be any literature identifying the most important CSFs for MSMEs in the retail sector in general and more specifically in a developing country such as Zimbabwe.

3.9 FEATURES OF AN IDEAL PERFORMANCE MEASUREMENT FRAMEWORK FOR MSMES

MSMEs may require a framework that is efficient, easy to apply and cost effective. This is because most MSMEs have limited resources especially information technology, and, therefore, require approaches and performance measurement frameworks that respond to their specific circumstances (Garengo *et al.*, 2005).

An ideal performance measurement framework is one which can encourage an enterprise to set performance targets and review performance from time to time. This ensures that the enterprise is still on course towards achieving its objectives. Focus should not be only on the results but determinants of those results as well (Taticchi et al., 2012). Therefore, it is important to understand the causal relationship between results and determinants of those results as this would help in deciding the course of action to take in order to steer an enterprise towards achieving its performance objectives (Garengo et al., 2005; Simpson et al., 2012).

The performance measurement framework should be flexible so that it responds to the changing circumstances of MSMEs (McAdam, 2000). Cocca and Alberti (2010) also argue that it is important to design a framework for small enterprises which is simple, clear, focused and which give useful information. Such a framework might be

more appropriate to MSMEs given that the majority are managed by ownermanagers who are less educated and may not to be able to comprehend complex frameworks.

Finally, the performance measurement framework should be balanced. A balanced framework is one which incorporates different performance dimensions (Garengo *et al.*, 2005). Kaplan and Norton (1992) consider a balanced framework to be one which incorporates financial and non-financial measures. Taticchi *et al.* (2008) argue that a balanced framework is one which incorporates financial and non-financial measures, internal and external measures and considers stakeholders. Therefore, a balanced framework may likely contribute to the success and survival of the MSMEs.

3.10 CONCEPTUAL FRAMEWORK FOR THE STUDY

The conceptual framework presented in Figure 3.1 is premised on the argument that both non-financial and financial performance have an impact on the success and survival of MSMEs. Non-financial performance impacts on the success and survival of MSMEs either directly or indirectly through its impact on financial performance. On the other hand, financial performance has a direct impact on the success and survival of MSMEs but does not have an impact on non-financial performance.

The study argues that a measure of financial performance such as reveue, cost and profit are outcome measures of the MSME's operation. It can be further argued that financial performance of MSMEs is influenced by non-financial performance, and, therefore, there is need for placing more emphasis on the measurement of non-financial performance rather than financial performance. The measurement and management of those non-financial CSFs which are likely to have an impact on financial performance CSFs is a better strategy for enhancing the performance of the MSMEs. Therefore, measurement and management of the means to an end may be better than measurement of the end itself. The non-financial CSFs which should be measured in order to influe the financial CSFs and, therefore, enhance the success and survival of MSMEs are shown in Figure 3.1.

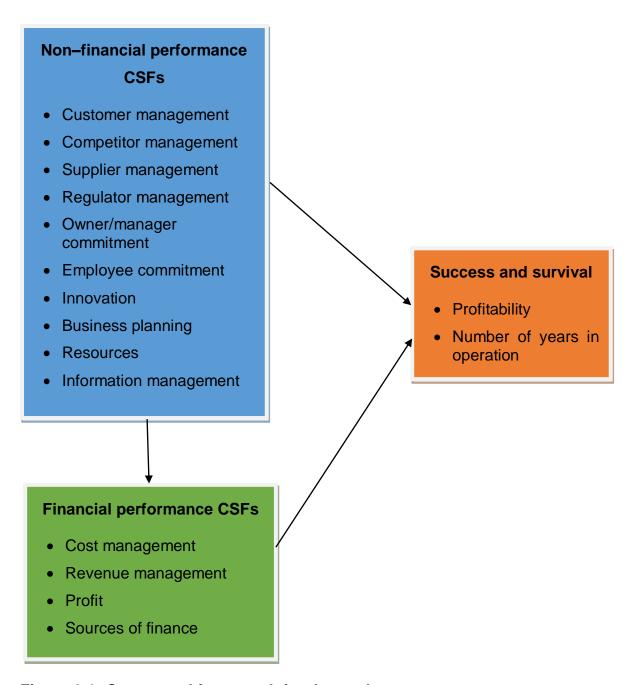


Figure 3.1: Conceptual framework for the study

The conceptual framework is based on the CSFs (Sections 3.4 and 3.5 focus on the CSFs presented in Figure 3.1) identified in the literature review. The framework proposes that KPIs and Key Performance Drivers (KPD) should be identified for each CSF and measured. Therefore, the measurement of performance should focus on the KPIs and KPDs which are derived from the CSFs. Such a thrust may give a holistic performance measurement for the enterprise.

3.11 SUMMARY OF CHAPTER

The chapter was dedicated to review of available literature on performance measurement in MSMEs and critical success factors for the performance of MSMEs. The chapter also explored the definitions of success and critical success factors. It emerged that the concept of success is not easy to define as the definition is often contextual to the owner/manager. The review of literature also indicated that the operating environment, customer base, information technology, and focus on past activities were some of the factors that distinguish MSMEs from large corporates. A literature review on the available performance measurement frameworks was also conducted. The literature review focused on the strengths and weaknesses of available performance measurement frameworks so that positive features are incorporated into the proposed framework and negative features avoided.

The chapter also presented the crtical success factors for the performance of MSMEs. The critical success factors identified in the study are commitment of the owner/manager, business planning, management of information, strategies to manage revenue and costs, innovation, management of customers, management of suppliers, management of competitors, the enterprise's pool of resources, conformance to regulations and management of sources of finance. Relationships between the levels of the critical success factors were also explored. The review of literature also identified the variables which define each critical success factor as well as key performance indicators for the variables. A conceptual framework for the study was developed based on these critical success factors. The critical success factors are the basis of the performance measurement framework sought to be developed in this study. The next chapter discusses the research methodology for this study.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 INTRODUCTION

The previous chapter involved a review of extant literature on the characteristics of MSMEs, the most common performance measurement frameworks for MSMEs, the CSFs for MSMES and possible relationships between the CSFs. The research methodology chapter focuses on the research approach and philosophy guiding this study. It provides the framework for collecting and analysing data thereby setting the tone for the empirical study. The success of any empirical study depends on the soundness of the research design adopted for the study. Section 4.2 covers the purpose of the study, Section 4.3 research methodology, whilst Section 4.4 concentrates on the tests for reliability and validity and Section 4.5 on research ethics. The chapter is concluded with a summary in Section 4.6.

4.2 PURPOSE OF THE RESEARCH

The purpose of this study was to explore the phenomena of performance measurement in retail MSMEs. The study sought to design a performance measurement framework to enhance the success and survival of retail MSMES operating in a developing country, with Zimbabwe being the focus of the study. This was achieved through identifying the CSFs for the performance of MSMEs, assessing the extent to which the retail MSMEs measure these factors and identifying those factors whose extent of measurement are likely to have an impact on the success and survival of the MSMEs. The study also sought to explore any possible relationships between the extents of measurement of the CSFs.

The study was mainly exploratory in nature. Thus, the purpose of the study was to establish the extent to which retail MSMEs measure financial and non-financial performance and, therefore, come up with a performance measurement framework which may be practically useful to the MSMEs. As the study was exploratory, the aim of the study was not to come up with a conclusive framework, but to set the groundwork for a framework which may be improved through further research. In an exploratory study there is room for further improvement of the study and the researcher should be willing to change his or her position as new data and insights emerge (Robson 2002; Saunders, Lewis & Thornhill, 2012).

4.3 RESEARCH METHODOLOGY

The research methodology is discussed by referring to the various layers of the research onion of Saunders, Lewis and Thornhill (2009) portrayed in Figure 4.1

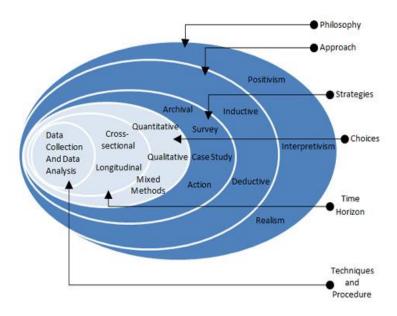


Figure 4.1: The research onion

Source: Saunders, Lewis and Thornhill (2009)

4.3.1 The research philosophy

It is important to adopt the appropriate research paradigm as different research paradigms results in research being carried in different ways (Hatch & Cunliffe, 2006). This means that different kinds of knowledge may be obtained if the same phenomena are observed from different philosophical perspectives (Creswell, 2001).

A research paradigm can be defined as a set of beliefs that guides an action (Saunders, Lewis & Thornhill, 2007) and in this case a set of actions that guides research. There are two main research paradigms namely: positivism and interpretivism (Creswell, 2006). The other paradigms are derived from these two (Saunders *et al.*, 2007).

A positivism paradigm maintains that there is existence of a social reality which can be observed objectively and independently of the observer (Hatch & Cunliffe, 2006). This paradigm also maintains that theoretical models can be developed that are generalizable and can explain cause and effect relationships leading to prediction of outcomes (Easterby-Smith, 1991; Saunders *et al.*, 2007). This paradigm is concerned with deductive or testing of existing theory (Creswell, 2006). Hence, the

positivist researcher starts with a theory, collects data that either supports or rejects the theory, and makes necessary revisions and conducts additional tests (Phillips & Burbules, 2000).

The interpretivism paradigm maintains that a social world is a creation of the individuals' experiences, memories and expectations (Crotty, 1998). This social world is recreated from time to time resulting in multiple realities (Denzin & Lincoln, 2003). The researcher needs to focus on understanding the meanings and interpretations of research subjects and understand the world from their point of view (Creswell, 2006; Saunders *et al.*, 2007). This paradigm has a subjective view of the world and is associated with gathering of qualitative data (Eriksson & Kovalainen, 2008). The paradigm is mainly suitable for theory building. Rather than starting with a theory (as in positivism), the researcher interacts with the research subjects and generate or inductively develop a theory or pattern of meaning from the data collected in the field (Crotty, 1998).

This study adopted both positivism and interpretivism paradigms. This is since the study involves both designing of performance measurement framework and testing of the framework.

4.3.2 The research approach

The study adopted the inductive approach. The inductive approach was used to design a performance measurement framework based on the literature review and empirical findings on the current performance measurement practices in MSMEs. This approach is in line with Gay and Weaver (2011) who argued that in inductive reasoning facts come first and a theory is built on the basis of these facts. It is, therefore, important to gather all available information or data about the situation before building a theory (Creswell & Plano Clark, 2010). Although the performance measurement framework designed may not be a theory in itself, the same inductive approach used when building a theory was adopted in order to develop a novel framework which is applicable to the MSMEs in the retail sector.

4.3.3 Research strategy

The study consisted of both a survey and multiple case studies. The survey was exploratory in nature. The exploratory survey used questionnaires as data collection instruments and targeted the owner/managers of formal retail MSMEs. An

exploratory survey is conducted when a study seeks to discover ideas and insights on a phenomenon as opposed to collecting statistically accurate data (Brown, 2006; Saunders *et al.*, 2012). The exploratory study helps to establish what would be happening, seeking new insights and assessing phenomena in a new light particularly if the nature of the problem is not known (Robson, 2002). Therefore, the survey was a baseline study to establish the current performance measurement practice of formal retail MSMEs in Harare, Zimbabwe, focusing mainly on those MSMEs operating in the Central Business District (CBD).

The exploratory survey through questionnaires was conducted before the semi-structured interviews (Appendix B) and information from the questionnaires was confirmed and clarified using the semi-structured interview. The semi-structured interview targeted the most senior employees in the accounts/finance department of the MSMEs and was descriptive in nature. A descriptive survey presents accurately a profile of research subjects so that the researcher has a clear picture of what is to be studied before collection of data is done (Saunders et *al.*, 2009).

Selected owner/managers were interviewed to assess the extent to which the proposed performance measurement framework can be used to influence the success and survival of the MSMEs. This was a theoretical validation of the performance measurement framework developed from the questionnaire survey and interviews held with senior employees in the accounts/finance section of the MSMEs.

The theoretical validation of the performance measurement framework adopted a multiple case study approach. In the first case one supposedly successful retail MSME from each category of retail MSMEs understudy was selected using purposive sampling method. An assessment was made of the extent to which these MSMEs use the performance measurement framework proposed in the literature review and survey. In the second case, one MSME in each of the categories of MSMEs under study and which seem to be struggling and whose line of business is similar to those selected in the first case was selected in order to assess the extent to which the proposed framework is used.

The study was cross-sectional in nature which means that it looked at performance measurement practice of MSMEs at a particular point in time. This made it possible for the study to be completed in time.

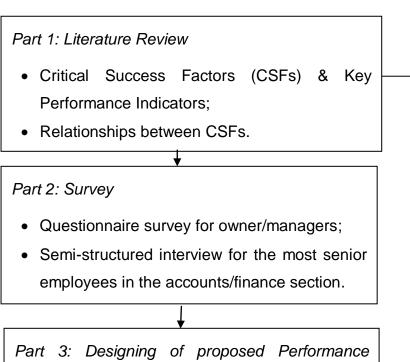
4.3.4 The research choices

The study used both a quantitative and a qualitative method implying that a mixed-method research design was adopted. The mixed-method was in the form of a sequential transformative design (Creswell, Plano Clark, Gutmann, & Hanson, 2003) where the study is done in two distinct phases, in this case, firstly the quantitative method phase followed by the qualitative method phase. Hence, the results from the quantitative study (surveys) informed the qualitative study (case study). The quantitative study provided a numerical perspective to performance measurement by simplifying the experience of owner/managers into numerical data well suited for statistical analysis. The qualitative study offered an in-depth description of the phenomenon of performance measurement. The data from the study was in the form of rich and detailed descriptions that captured the researcher's meaningful personal experiences. The study was in four parts as shown in Figure 4.2.

The first part of the study attempted to identify through an extensive review of literature the CSFs which influence the business performance of MSMEs, and possible existence of relationships between these CSFs. The information from the literature review guided the choice of performance measures included in the questionnaire as well as the overall designing of the questionnaire. The information also enabled a comparison to be made between the performance measures reported in literature and the performance measures identified in the empirical study, thereby demonstrating how new knowledge had been created. The literature was found from textbooks, University of South Africa's and Bindura University of Science Education's electronic library resources, past theses and dissertations. The outcome of this part of the study was a business performance measurement questionnaire (prototype framework) which was refined and tested in the next parts of the study.

The second part of the study involved a survey of formal retail MSMEs operating in Harare, CBD. The survey attempted to establish the current performance measurement practices of the MSMEs. The survey enabled the researcher to know what is happening on the ground in order to identify weaknesses of the current practices and propose possible improvement. There was a possibility that some MSMEs were already involved in some form of performance measurement, but in an informal and haphazard manner. Therefore, the survey was a baseline study in order

to understand the current state of affairs in respect of business performance measurement by MSMEs in the retail sector.



- Part 3: Designing of proposed Performance measurement framework
 - Based on literature review;
 - Based on analysis of survey data.
- Part 4: Case study: Testing applicability of proposed framework
 - On MSMEs presumed to be successful;
 - On MSMEs presumed to be struggling.
- Part 5: Presentation of the final proposed Performance measurement framework
 - Based on the framework proposed in part 3 and the assessment of applicability of the framework in part 4.

Figure 4.2: The research process (Author's own)

The third part of the study sought to propose a performance measurement framework based on the literature review from part 1 and analysis of data from the survey in part 2. Hence, the framework emerged from the empirical findings and the literature review. This implies that the inductive approach was used in order to build the framework. The inductive approach involves the three steps of making observations, categorising the observations, and establishing associations in order to come up with a construct, framework, or a model (Carlile & Christensen, 2005). The arrow outside the boxes between part one and part three indicates that the framework to be developed considers other factors not reflected in the empirical study. Examples of such factors reported in literature are the need for the framework to be simple and less costly to implement, and relying on a simple information technology infrastructure.

The fourth part of the study involved multiple case studies that meant to assess the perceptions of selected owner/managers on the extent to which the proposed performance measurement framework may be used to enhance the success and survival of retail MSMEs. Thus, the selected owner/managers were asked to evaluate the proposed performance measurement framework and recommend any improvements on it. The results from the case studies were used to further refine the performance measurement framework proposed in part 3 of the study.

The fifth part of the study presents a refined and final proposed performance measurement framework developed based on all four previous parts. Thus, the framework at this stage is the final outcome of the study.

4.3.5 Time horizon

The study was cross-sectional in that data on the perception of owner/managers and the senior employees in the accounts/finance section of the MSMEs were collected at a point in time rather than over a long period.

4.3.6 Techniques and procedures

The research procedures focusing on identifying the study population, sample and sampling procedure, research instruments used and data analysis are discussed in the following sub-sections.

4.3.6.1 Population

The researcher could not find a comprehensive database of all the formal retail MSMEs operating in the CBD of Harare. As a result, the study focused on the identifiable active formal retail MSMEs whose owner/managers were willing to take part in the study. The MSMEs had to be operating in the CBD of Harare and specialising in either of grocery, clothing and furniture/electrical goods. The researcher was able to identify 373 active formal retail MSMEs from both the records of the ministry of small and medium enterprises and the physical identification of the retail MSMEs operating within the radius of 2.5 km of the CBD. The identified 373 MSMEs were those whose owner/managers had indicated their willingness to take part in the study. It was possible to physically identify those targeted formal retail MSMEs operating in the CBD which were either in the records of the ministry of small and medium enterprise development or not. Five research assistants were engaged for this exercise. The role of the research assistants was limited to the physical identification of the active formal retail MSMEs which were the focus of the study. Table 4.1 presents the number of active formal retail MSMEs identified and considered for the study.

Table 4.1: The population of retail MSMEs in CBD, Harare

Category of MSMEs	Population size	%
Groceries and food outlets	69	18
Clothing only	200	54
Furniture and, or electrical gadgets	42	11
Combination of either of groceries, clothing and furniture/electricals	62	17
Total	373	100

Source: Compiled by author

The researcher focused on formal retail MSMEs operating in the CBD of Harare because of their high level of commercial activity in relation to those operating in other areas. These MSMEs are likely to provide service to customers from all the suburbs of the city. The MSMEs in the CBD of Harare are also likely to provide

service to customers from other neighbouring small towns, nearby farms and rural areas.

4.3.6.2 Sample and sampling procedure

Harare City was purposively selected from four major cities in Zimbabwe. Harare was considered for the study because it is the capital city of Zimbabwe and has a large number of MSMEs operating in the CBD compared to the other cities in Zimbabwe. Thus, it is the commercial hub of Zimbabwe. All the identified 373 formal retail MSMEs willing to take part in the study were considered for the study. Questionnaires were distributed to owner/managers of the 373 MSMEs operating in the CBD of Harare. There was, however, a need for the sampling of the most senior employees in accounts/finance department of MSMEs to be interviewed. Stratified random sampling was employed to select the employees to be interviewed. In stratified random sampling, the sample has the same proportion of elements as in the population (Saunders et al., 2012). Twenty most senior employees in the accounts/finance department of MSMEs were interviewed. The distribution of the senior employees interviewed was eleven employees from MSMEs specialising in clothing (200/373 x 20), two employees from furniture and electricals (42/373 x 20), four employees from grocery shops (69/373 x 20) and three employees (62/373 x 20) dealing in a combination goods. The MSMEs in each category of the MSMEs under study were assigned numbers and a computer used to randomly select the MSME to be included in the sample. In the case where a selected senior employee was not in a position to take part in the study, a replacement was made, selected randomly from the remaining MSMEs.

Purposive sampling was used to select MSMEs included in the multiple case studies. The MSMEs were selected from the 189 MSMEs which took part in the study. This means that the owner/managers of the MSMEs selected for the interviews had also taken part in the questionnaire survey. The researcher specifically selected the MSMEs which could help build the understanding of the phenomenon of performance measurement of MSMEs in the retail sector. In the first case one presumably successful MSME was selected from each of the categories of retail MSMEs understudy. Successful MSMEs in this study were taken to be those which have been operating profitably (had highest profit margins) for the longest period. In the second case, one MSME presumably performing very badly was chosen from

each category of MSMEs under study. MSMEs performing very badly were considered as those which have persistently incurred losses (had lowest profit margins) in at least the last three years.

4.3.6.3 Data collection procedure

Data was collected from MSMEs using the survey and case study research strategies. Permission to collect the data was sought from the ministry of Small and Medium Enterprises and Cooperative Development before collecting the data (Appendix H). Consent was also sought from the participating MSMEs before collecting data. The consent was sought at the time when the researcher was distributing the questionnaires in order to reduce costs. Those MSMEs not willing to take part in the study were, therefore, not considered for the study. The next sections identify the data collection instruments used for the survey and the case study research strategies.

4.3.7 Data collection instruments for surveys

Questionnaires were administered to owner/managers of the MSMEs. The questionnaire is included in Appendix C. The questionnaire was considered suitable for gathering data from owner/managers since it is a convenient data collection tool in the sense that the respondent can complete it during his or her convenient time. However, most owner/managers indicated that the questionnaire was too long and complex prompting the researcher to read the questions in the questionnaire and complete it as the respondents responded to the questions. In all the cases where the researcher completed the questionnaire on behalf of the respondents, the respondents had been given a copy of the questionnaire in advance so that they familiarise with its contents. The researcher would only complete the questionnaire when a respondent had indicated that he or she was ready to respond to the questions. Although the researcher's conduct of asking respondents questions in the questionnaire and completing the questionnaire on their behalf may have introduced bias, the researcher tried to be as neutral as possible. In fact, the conduct brought more clarity to the questionnaire as the respondents had a chance to seek further clarity on questions perceived not to be clear. Owner/managers of MSMEs are usually too busy or difficult to get hold of.

The owner/managers who consented to completing the questionnaires on their own were given one month to complete the questionnaires and follow up phone calls were made to check if they had completed the questionnaires before going to collect the questionnaires. This resulted in a higher response rate among those to whom questionnaires had been distributed. However, completion of the questionnaire by the respondent in the absence of the researcher has a disadvantage in that it does not give enough room to the researcher and respondent to clarify unclear questions.

Interviews (Appendix A) were carried out with the most senior employees in the accounts/finance section of MSMEs after data had been collected from the owner/managers of the MSMEs and analysed. This enabled the researcher to ask senior employees follow up questions based on the responses provided by owner/managers in the questionnaires. Interviewing senior employees in the accounts/finance section after administering questionnaires to the owner/managers of MSMEs sought to improve the validity of the study as more relevant questions were likely to be asked during the interview. The senior employees in the accounts/finance section of MSMEs are expected to be more knowledgeable on the performance measurement practices in place in these MSMEs. Hence, an interview was regarded as the best tool for collecting the data as it afforded the researcher the opportunity to probe further on questions which needed further clarity.

4.3.8 Data collection instruments for case studies

The data collection strategies used for the case study research strategy were interviews (Appendix B). Owner/managers of selected MSMEs were interviewed. The interview questions in the case studies were based on the performance measurement framework designed from the responses of owner/managers and senior employees obtained during the survey stage of the study. The selected owner/managers were given the proposed performance measurement framework and interview questions some days before the interviews so that they familiarise with the framework and interview questions ahead of the interview date.

4.3.9 Data analysis

The data from the survey stage of the study was mainly quantitative in nature while that from the case study mainly qualitative in nature. Hence, the data from the survey was analysed using quantitative data analysis techniques.

4.3.9.1 Quantitative data analysis

Data was analysed in two stages, using SPSS version 20. The first stage of data analysis involved descriptive statistics where the data from questionnaire was analysed using percentage frequencies and measures of central tendencies. The descriptive statistics highlighted the performance measurement practices of the retail MSMEs. It provided rich information on the extent of measurement of various items included in the questionnaire. Thus, those performance measures which are assessed the most were identified. The descriptive statistics analysis considered all the items in the question.

The second stage of data analysis involved factor analysis where a new set of CSFs emerged. Although the descriptive statistics analysis conducted in the first stage analysed all the items in the questionnaire in order to capture all the responses of each owner/manager, it is important to note that the constructs in the questionnaire had not been validated. The questionnaire was designed based on information gathered from literature review. Thus, the second stage was concerned with validating the questionnaire through exploratory factor analysis. The factor analysis resulted in a new set of factors which were then subjected to reliability test. After the reliability test, factor scores were computed and used in conducting correlation and regression analysis. Likert scales can be combined into indexes (average scores) to come up with interval values which can be used in further analysis such as correlation tests and regression analysis (Allen & Seaman, 2007; Carifio & Perla, 2008; Brown, 2011; Boone & Boone, 2012; Joshi, Kale, Chandel & Pal, 2015).

4.3.9.2 Qualitative data analysis

Responses from interviews were coded into thematic areas and analysed through the use of NVivo. The qualitative data was analysed by revealing themes with various coding procedures to induce relevant meanings and themes from the abundant text. The researcher started with open coding to determine some major categories that guided further exploration. The advantage of qualitative data is that it allows researchers room to find themes, patterns, and interrelationships within the data and understanding of the phenomenon of performance measurement as a whole, rather than only the specific variables under study.

4.4 RELIABILITY AND VALIDITY

A pilot study was carried out to test the reliability and content validity of the research instruments developed and used in the study. The questionnaire was tested for internal consistency reliability using Cronbach's coefficient alpha determined using SPSS version 20. The acceptable alpha estimate for social science research at this early stage of study (pilot study) is at least 0.70 (Nunnally, 1978). Nunnaly and Bernstein (1994) also suggest that the minimum alpha for a newly developed scale should be 0.70.

There are several facets of validity. However, the most important seem to be content validity and construct validity (Lawshe, 1975; Carmines & Zeller, 1979). Content validity refers to the extent to which a measure represents all facets of a given phenomenon (Lawshe, 1975). This form of validity examines the comprehensiveness of the items represented in the content domain or construct of a phenomenon (Carrier, Dalessio, & Brown, 1990). Content validity was achieved by comprehensively reviewing literature on performance measurement focusing mainly on the domain definition, domain relevance, and domain representativeness as suggested by Sireci (1998).

After completing literature review, a questionnaire, and interview guide were developed. The questionnaire and interview guide items were subjected to item judgment by experts. The experts consulted were the researcher's supervisor at University of South Africa, lecturers from the department of Accountancy at Bindura University and University of Zimbabwe. A panel of experts or fellow researchers can be used to assess the clarity and purpose of a research instrument thereby ensuring its content validity (Creswell, 2001; Leedy & Ormrod, 2005).

Construct validity which is an assessment of the extent to which an instrument measure what it intends to measure was assessed through exploratory factor analysis.

4.5 RESULTS OF THE PILOT TEST

The pilot test was carried out to determine the internal consistency and reliability of the research instruments. A total of 25 responses were obtained for the pilot study and data was analysed using SPSS version 20. The sample size was considered as adequate as some authors suggest a sample size between 10 and 30 as being

adequate for a pilot study (Isaac & Michael, 1995; Hill, 1998; Hertzog, 2008). Cronbach Alpha was used to determine internal consistency. Cronbach's Alpha coefficient was regarded as the most suitable measure of reliability in this study because of its wide use in previous studies (Nunnally, 1978; Peter, 1979; Dobni, 2008). An alpha value greater than 0.9 implies excellent internal consistency, greater than 0.8 good, greater than 0.7 acceptable, greater than 0.6 questionable, greater than 0.5 poor and below 0.5 unacceptable (George & Mallery, 2003).

However, the use of Cronbach alpha to detect internal consistency may have been affected by smaller sample size as only 25 questionnaires were returned in the pilot study. Most researchers argue that the minimum sample size for calculating Cronbach alpha should be at least 30 (Crocker & Algina, 1986; Johanson & Brooks, 2009). Therefore, the Cronbach's alpha reliability test was conducted again in the final dataset to confirm the reliability of using these constructs in the final study and the results of the tests are presented in Table 5.40. The Cronbach alpha results for each CSF for the pilot study is shown in Table 4.2. The full reliability test results are presented in appendix M.

Table 4.2: Pilot study reliability test

No	Critical success Factor	Cronbach alpha
1	Owner/manager commitment	.951
2	Employee commitment	.914
3	Business planning	.697
4	Management of information	.914
5	Innovation	.974
6	Enterprise resources	.816
7	Customer management	0.925
8	Supplier management	0.839
9	Competitor management	0.951
10	Management of sources of finance	0.790
11	Management of regulators	0.912

No	Critical success Factor	Cronbach alpha
12	Cost management success factor	0.925
13	Revenue management	0.755
14	Profit	0.906

The results in Table 4.2 reveal that Cronbach alpha coefficient for each factor is above the minimum acceptable value of 0.60. This suggests that the internal consistency is high. However, as highlighted above, the reliability test is repeated for the final data since the sample for the pilot study was too low and, therefore, results may not be dependable.

4.6 ETHICAL CONSIDERATION

This study posed minimum risk just like most researches in social science. Therefore, there was need to be proactive and consider some of the possible ethical problems. These possible ethical problems were addressed in terms of the three basic principles on ethics outlined in the Belmont report namely: having respect for persons, beneficence, and justice (US Department of Health, Education, and Welfare, 1979). These principles seem to have gained international approval.

Having respect for persons means the humanly treatment of individuals, affording them the chance to make own decisions and choices, and not using them as a means to achieve your objectives (US Department of Health, Education, and Welfare, 1979). The respect for persons was met by obtaining the consent of owner/managers and senior employees in the accounts/finance section to take part in the study.

The researcher accompanied the questionnaire with a permission letter and a consent form which sought for the owner/manager's consent to take part in the study voluntarily. The permission letter requested for permission to conduct a study in the enterprises and the consent form asked for the respondents' consent to take part in the study. The consent form highlighted the title of the study, the purpose and objectives of the study, proposed research methods and procedures, the way in which results are to be utilised, participants' right to terminate their participation without being penalised on physical, emotional, social and/or economic levels, potential advantages of participating in this study, how confidentiality and anonymity

will be ensured, as well as institutional affiliations of the researcher (Visagie, 2012). Voluntary participation was further emphasised during the initial contact sessions with all the participants.

The names of the research subjects were not disclosed in the research report in order to ensure privacy and confidentiality. The research instruments were designed in such a way that the participants who took part in the study cannot be identified. The participants who were not owner/managers were assured that their views and opinions on the company would not be disclosed to owner/managers of the company. The owner/managers were given a guarantee that information on the company would not be passed on to their competitors or government agents such as tax authorities.

The other principle of ethics considered is beneficence. Beneficence means doing to others what you would want to be done to you (Visagie, 2012). The study was, therefore, designed in such a way that psychological, social, and financial risks for all stakeholders were minimal and potential benefits such as personal and professional development and growth are maximised (Visagie, 2012). Therefore, the study attempted to minimise the risks of harm to the participants and maximise the potential benefits to both the researcher and the participants.

Lastly the principle of justice was observed when selecting the participants. Justice means treating research subjects fairly and designing the research so that the benefits and the burdens of carrying out the study are shared equitably (US Department of Health, Education, and Welfare, 1979).

4.7 SUMMARY OF CHAPTER

The chapter focused on the research approach and philosophy guiding this study. It provided an overview of the research process clearly spelling out how the pilot study and the main study were conducted. The study was a survey of retail MSMEs in Harare CBD. The study was both quantitative and qualititative in nature. Questionnaires were administered to owner/managers and interviews held with senior employees in the accounts/finance section of MSMEs and with selected owner/managers. The study adopted both positivism and interpretivism paradigms. The study was also inductive as the performance measurement framework emerged from the study.

The pilot study was carried out to test the reliability and content validity of the research instruments. The results of the pilot study indicated that the questionnaire was reliable although there were some adjustments to the questionnaire items so as to improve the Cronbach's Alpha and, therefore, the internal consistence. The pilot study also resulted in the rephrasing of some of the interview questions. The next chapter presents the results of the main study.

CHAPTER FIVE: DATA PRESENTATION, ANALYSIS AND DISCUSSION

5.1 INTRODUCTION

The previous chapter focused on the research approach and philosophy guiding this study. It provided the framework for collecting and analysing data. This chapter focuses on data presentation, analysis, interpretation, and discussion as guided by the research objectives presented in Chapter 1. Section 5.2 is concerned with analysis of quantitative data and Section 5.3 presents the responses from interviews held with senior employees in the accounts/finance sections of the MSMEs. The chapter concludes with a summary in Section 5.4

5.2 QUANTITATIVE STUDY

This section is concerned with analysis of quantitative data. The analyses of demographic data, focuses on performance measurement practice of MSMEs and on development of a provisional performance measurement framework through factor analysis and stepwise multiple regression analysis.

5.2.1 Analysis of demographic data

This section presents the response rate and analysis of demographic data. The study gathered demographic information on the MSMEs and the owner/ managers of the MSMEs. The information gathered on MSMEs concerned the type of goods sold by the MSMEs, number of full time employees, number of years the enterprise has been in operation and level of profit margin in the last three years. The information on owner/managers regarded the highest level of education of the owner/manager.

The relationships between the demographic variables are also analysed in this section. In order to have an in depth understanding on the nature of the MSMEs being investigated, there was need to test various relationships between the MSMEs' demographic variables. Kruskal-Wallis H Test was carried out to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable. Spearman correlation test and Kendal Tau B test were also performed in order to test the relationship between the demographic variables. The Spearman correlation test and Kendal Tau B test were performed concurrently in order to safeguard against use of an inappropriate test as there is a lot of debate and discord on the best method to use among these two tests when analysing ordinal scale data.

5.2.1.1 Response rate for questionnaires

Questionnaires were administered to 373 retail MSMEs operating in the CBD of Harare and specialising in either of groceries, clothing, and furniture and electrical appliances. Out of the 373 questionnaires administered to owner/managers, 201 questionnaires were returned/completed. Of the 201 questionnaires received, 12 had too many blank spaces and were considered unusable for analysis. Therefore, the effective response rate was 50.67%. The response rate is within the response rates of similar studies carried out before. Previous studies on MSMEs were found to have average response rates between 30% and 50% (Sivo, Saunders, Chang & Jiang, 2006).

5.2.1.2 Types of goods sold

The study focused on retail MSMEs which deal in any of clothing, furniture and electrical gadgets, grocery, and any combination of these goods. Most of the MSMEs who responded to the questionnaire deal in clothing. This may be due to the fact that MSMEs dealing in clothing make up the largest component of MSMEs in the study population with 54% of them being part of the study population. There was also a relatively high response rate from those dealing in furniture/electrical gadgets as evidenced by a higher percentage component (18%) well above their percentage component in the study population (11%). The number of MSMEs which responded to the questionnaire is shown in Table 5.1

Table 5.1: Number of MSMEs according to type of goods sold

	Number	Percent
Clothing	86	45.5
Furniture/ electrical gadgets	34	18.0
Grocery	46	24.3
Combination	23	12.2
Total	189	100.0

5.2.1.3 Number of full time employees and size of enterprise

The number of employees may be an indication of the size of an enterprise. The guideline by the European Commission (2003) was used to define the size of the

enterprise in this study. Table 5.2 reveals that most of the enterprises which took part in the study were small companies with between 10 and 50 employees. The fact that at least 72% of MSMEs included in the study employs 10 employees and above may suggest that MSMEs in the retail sector have a significant contribution towards employment creation.

Table 5.2: Number of full time employees and size of enterprises

Number of employees	Size of enterprise Frequency		Percent
Less than 10	Micro	53	28.0
10-50	Small	101	53.4
Above 50	Medium	35	18.5
Total		189	100.0

5.2.1.4 Number of years the enterprise has been in operation

The number of years an enterprise has been in operation can be used as an indication of the enterprise's survival (Box, 2005). It can be seen in Table 5.3 that most of the enterprises (92%) have been in operation for at least three years and about 53% of these enterprises for more than five years. However, only 7% of the MSMEs were in operation for more than 11 years suggesting that most MSMEs may not be surviving for a very long time. This confirms the assertion from previous studies that most MSMEs do not survive for a long time (Arinaitwe, 2006; Okpara, 2011; Frazer *et al.*, 2012; Ates *et al.*, 2013).

Table 5.3: Number of years MSMEs has been in operation

Number of years	Frequency	Percent		
Less than 3 years	15	7.9		
3-5 years	73	38.6		
6-8years	61	32.3		
9-11years	27	14.3		
Above 11years	13	6.9		
Total	189	100.0		

5.2.1.5 Average level of profit in the last three years

Level of profit is widely regarded as a measure of an enterprise's financial performance (Blackburn *et al.*, 2013). Table 5.4 indicates that most of the MSMEs who responded to the questionnaires reported an average of low profit in the last three years. Only 29% of the respondents indicated that they made a loss in the last three years which implies that most of the MSMEs included in the study were profitable in the last three years of their trading.

Table 5.4: Average level of profit in the last three years

Level of profit	Frequency	Percent
Loss	55	29.1
Low	75	39.7
Moderate	39	20.6
High	20	10.6
Total	189	100.0

5.2.1.6 Level of education of the owner/manager

Some studies suggest that the level of education of owner/manager has an influence on the performance of an enterprise (Barringer & Jones, 2004; Blackburn *et al.*, 2013; Bager *et al.*, 2015). A significant number of owner/managers who took part in the study had only secondary level educational qualification. It can be deduced from Table 5.5 that 64% of the respondents did not have business related tertiary qualification. This may suggest that the attainment of a business related tertiary qualification may not be a major driving force towards venturing into retail business in Zimbabwe.

Table 5.5: Level of education of the owner/manager

	Frequency	Percent
Secondary education	71	37.6
Business related tertiary education	68	36.0
Other qualification	50	26.5
Total	189	100.0

5.2.1.7 Level of profit and type of goods sold

The Kruskal-Wallis H test was performed to assess the existence of possible differences between level of profit and class of goods sold. The Kruskal- Wallis H test was suitable for the analysis because the dependent variables were on an ordinal measurement scale and the independent variables were nominal with more than two categories. The Kruskal-Wallis H test indicates that there is no statistically significant difference between class of goods sold and level of profit at 5% significance level (H (3) = 7.182, p = 0.066). This indicates that the level of profit is not different among different types of goods sold.

5.2.1.8 Level of profit and level of education of owner/managers

Spearman correlation and Kendall Tau B correlation tests were performed to establish if there is a correlation between the level of profit and the level of education of the owner/managers. The results of the correlation tests are shown in Table 5.6 below. The measurement scales considered for this test were ordinal scales for level of profit and level of education as reflected in the questionnaire in Appendix C Therefore, the relationship tested was for two ordinal scaled variables. It may be important to highlight that the study had two scales of measurement for level of profit. There was the interval scale reflecting the actual profit margin realised by the MSMEs and the ordinal scale indicating whether the profit margin was a loss, low, moderate or high.

Table 5.6: Correlation between level of profit and level of education of the owner/manager

Correlation Test	Correlation coefficient	Significance level (p value)
Spearman	.087	.233
Kendall Tau B	.077	.266

The two tests reveal that the correlation between level of profit and level of education is very weak and the results are statistically insignificant. Therefore, level of profit of a MSME may not be related to the level of academic qualification of the owner/manager. This confirms the assertion from previous studies that it is training related to the business that is important and not academic qualification (Berko *et al.*, 2016; Padachi & Bhiwajee, 2016). However, the findings refute assertions by Asah *et al.*, (2015) that level of company performance is related to the level of academic education of owner/managers. Perhaps it may be concluded that entrepreneurship education is the one that has influence on MSMEs' performance and not formal academic education.

5.2.1.9 Level of profit and number of employees

Spearman correlation and Kendall Tau B correlation tests were performed to establish if there is a correlation between the level of profit and the number of full time employees in the MSMEs. The number of employees measurement scale considered for this test was ordinal scale rather than interval scale. The results of the correlation tests are shown in Table 5.7.

Table 5.7: Correlation between level of profit and number of employees

Correlation Test	Correlation coefficient	Significance level (p value)
Spearman	.167	.028
Kendall Tau B	.139	.025

The two correlation tests reveal that the relationship between level of profit and number of full time employees is weak and the results are statistically significant. Although weak, there is a positive correlation between level of profit and the number of full time employees employed by the MSMEs. Some studies found a positive relationship between the size of an enterprise and profitability (Saliha & Abdessatar,

2011; Doğan, 2013; Perényi & Yukhanaev; 2016). This may suggest that both level of profit and the size of MSMEs may be appropriate measures of the MSMEs' success and survival as the two were found to be somehow positively related in this study. However, some studies found a negative relationship between profitability and the size of the enterprise (Banchuenvijit, 2012).

5.2.1.10 Level of profit and number of years in operation

Person correlation test was performed to establish if there is a correlation between the level of profit and the number of years the MSMEs have been in operation. The measurement scales for level of profit and number of years the MSMEs have been in operation were interval scales as the actual profit margin and the actual number of years were considered for the test. The results of the Pearson correlation tests are shown in Table 5.8.

Table 5.8: Correlation between level of profit and number of years in operation

Correlation Test	Correlation coefficient	Significance level (p value)
Pearson	.081	.267

The results in table 5.8 indicate that there is no relationship between the level of profit and the number of years the MSMEs have been in operation. This finding resonates with that of Indarti and Langenberg (2004) who also did not find a positive relationship between the MSMEs' period of operation and the level of profit. However, some researchers found a positive relationship between the number of years the MSMEs has been operation and the level of profit (Kristiansen, Furuholt & Wahid, 2003; Chiliya & Roberts-Lombard, 2012).

5.2.2 Current performance measurement practices of retail MSMES in Zimbabwe

This section presents responses of owner/managers regarding the performance measurement practices of retail MSMEs. The responses of the owner/managers on the performance measurement practice of each variable and the performance measures defining the variables are presented in the following sub-sections. The average variable composite score for each variable that is defined by several performance measurement items was calculated using SPSS version 20 by following the command:

All the measurement items in the questionnaire are regarded as having an equal weighting in this study.

5.2.2.1 Owner/Manager commitment critical success factor

The responses presented in Table 5.9 suggest that most MSMEs measure the level of entrepreneurial orientation, learning support for owner/manager and employee, employee empowerment and employee involvement. The variable whose extent of measurement was low is owner/manager's involvement in the running of the business. However, the majority of MSMEs indicated that the level of all the above variables, except for entrepreneurial orientation, were generally low.

Table 5.9: Measurement of owner/manager commitment variables

Variable		Extent of measurement (%)				Intensity of parameter (%)	
		Rarely	Usually	Mostly	Always	Low	High
Involvement in running of business	25	30	33	8	4	55	45
Entrepreneurial Orientation	21	25	39	11	4	49	51
Support of learning for owner/manager and employee	19	25	48	6	2	65	35
Employee empowerment	15	25	50	7	3	58	42
Employee involvement	20	26	43	8	3	61	39

Table 5.10 presents the three measures of central tendency for performance measures pertaining to each variable. All the three measures of central tendency, namely: the mean, median, and mode are presented in this study because of the perceived discord in literature with regard to the best measure of central tendency for ordinal data (Allen & Seaman, 2007; Boone & Boone, 2012). Therefore, the results are analysed based on the three measures in order to see the picture that emerges if all the measures are considered.

In terms of owner/manager involvement in the running of the business, it can be seen from Table 5.10 that most MSMEs usually record the number of meetings attended or convened by owner/managers as well as their new business contacts. The number and impact of decisions made by most owner/managers are either never measured or rarely measured. An analysis of the above results reveals that about 55% of owner/managers indicated that they never or rarely measure performance measures related to 'owner/manager involvement in running of business. Of the 45% which indicated that they measure the variable, majority indicated that the level of owner/manager involvement in running the business is low in their MSMEs. Therefore, the extent of measurement and intensity of owner/manager involvement in running business is very low in most MSMEs. Coles et al. (2008) and Guest (2009) indicated that the level of participation and involvement of owner/managers in the running of business is key for the success of MSMEs. The lack of involvement in running business may be contributing to the demise of some MSMEs in the retail sector in Zimbabwe.

The aspects of entrepreneurial orientation or risk taking behaviour of owner/manager which are usually measured by MSMEs are number of new unknown markets ventured into with the blessing of the owner/manager and amount of resources committed by owner/manager to ventures with unknown outcomes. The measures for these aspects are regarded as being low for most MSMEs. Most MSMEs indicated that they never measure number of new unknown products introduced into existing market with the blessing of the owner/manager. Generally the level of entrepreneurial orientation in most MSMEs is very low. This may partly explain the low profitability in some MSMEs as past studies suggest that those MSMEs whose owner/manager have a low appetite for taking risk exhibit low entrepreneurial orientation and, therefore, low profitability (Papadaki & Chami, 2002; Blackburn et al., 2013).

Most (56%) of the owner/managers who took part in the study reported that they usually measure most of the aspects relating to support of continuous learning for the owner/manager and employees and the support is generally low. The aspects usually measured by the MSMEs are number of courses attended by owner/manager per any given period, number of employees trained per given period, amount of time devoted to training activities per given period and amount of funds

committed towards training programmes per given period. They however, rarely measure the effectiveness of the training programmes. Although the majority of owner/managers indicated that they assess their level of commitment to training, their level of support towards training was perceived to be low. The low support for training may be due to limited financial resources. Previous studies has shown that there is a relationship between training and business performance (Ling *et al.*, 2014). Therefore, low level of training in some of the MSMEs may be contributing towards poor performance of some of the MSMEs.

In terms of paying attention to aspects that promote employee commitment, most owner/managers confirmed that they usually measure the number of employer initiated training and educational programmes attended by employees, the number of employees trained on employer's costs and the number of self-directed business actions pursued by employees. The levels of the performance measurement parameters of most of these aspects are perceived to be low. Those MSMEs which perceive the level of employee commitment performance measurement parameters to be low in their MSMEs may focus on supporting employee training in order to improve their performance as previous studies have found that training of employees may promote employee organisational commitment and, therefore, organisational performance (Meyer & Smith, 2000; Bartlett, 2001; Ling et al., 2014; Ntalianis et al., 2015).

The last variable looked at under owner/manager commitment was owner/manager involvement of employees. The aspects defining this variable were the number of employee feedback meetings arranged by the employer per given period and number of key responsibilities assigned to employees by the owner/managers. On average, most MSMEs rarely measure these aspects as indicated by the median and mode values of 2 in table 5.10 which represent rarely measured on the extent of measurement scale. The owner/managers of the MSMEs also perceive the level of these measurement parameters to be low. The failure by most MSMEs to monitor the extent to which they involve employees in running the business and the perceived low involvement of employees is likely to have a negative impact on the business performance of those MSMEs. Involvement of employees can act as a catalyst in the commitment and efficiency of employees leading to improved organisational performance (Ntalianis *et al.*, 2015).

Table 5.10: Owner/manager commitment average performance measures

Performance measures		of measur	Intens param	•	
		median	mode	median	mode
Involvement in the running of the business:					
Time spent by owner/managers in conducting the enterprise's business	2.49	2	3	1	1
Number of business meetings attended by owner/managers	2.53	3	3	1	1
Number of business meetings convened by owner/managers	2.69	3	3	1	1
Number of decisions made by the owner/manager		2	1	1	1
Number of new business contacts developed by the owner/manager	2.56	3	3	1	1
Impact of decisions made by owner/manager	1.85	2	1	2	2
Variable composite score	2.40				
Entrepreneurial orientation (Risk taking behaviour):					
Number of new unknown markets ventured into with the blessing of the owner/manager	2.50	3	3	1	1
Amount of resources committed by owner/manager to ventures with unknown outcomes	2.92	3	3	2	2

Performance measures		of measu	Intensity of parameter		
		median	mode	median	mode
Number of new unknown products introduced into the market with the blessing of the owner/manager	2.11	2	1	1	1
Composite score	2.51				
Support of continuous learning for owner/manager and employees:					
Number of short courses/workshops/seminars attended by owner/manager per any given period	2.40	3	3	1	1
Number of employees trained per given period	2.49	3	3	1	1
Amount of time devoted to training activities per given period	2.54	3	3	1	1
Amount of funds committed towards training programmes per given period	2.75	3	3	1	1
Effectiveness of training programmes	2.16	2	1	1	1
Composite score	2.47				
Employee empowerment:					
Number of employer initiated training and educational programmes attended by employees	2.37	2	3	1	1

Performance measures		of measur	Intens param	_	
		median	mode	median	mode
Number of employees trained on employer's costs	2.70	3	3	1	1
Number of self-directed business actions pursued by employees		3	3	1	1
Composite score	2.56				
Owner/manager involvement of employees:					
Number of employee feedback meetings arranged by employer per given period	2.20	2	2	1	1
Number of key responsibilities assigned to employees by the owner/managers		2	1	1	1
Composite score	2.19				

Thus, the three measures of central tendency for all the variables pertaining to owner/manager commitment reveal that the performance measurement parameters for most of the employee commitment variables are low. Only the impact of decisions made by owner/managers and amount of resources committed by owner/managers to ventures with unknown outcomes were considered to be high.

5.2.2.2 Employee commitment critical success factor

Employee commitment is defined in this study by three broad variables, namely: employee involvement in decision-making, job satisfaction, and staff loyalty. These variables are presented in Table 5.11.

Table 5.11: Measurement of employee commitment variables

Madal Ia	Extent of measurement (%)					Extent of measurement (%)			parai	sity of meter %)
Variable	Never	Rarely	Usually	Mostly	Always	Low	High			
Employee involvement in decision-making	20	48	25	6	1	49	51			
Job satisfaction	36	41	17	5	1	52	48			
Staff loyalty	25	37	29	6	3	52	48			

Most MSMEs (68%) either never measure or rarely measure employee commitment variables. The performance measurement parameters which make up the above variables are unpacked and further analysed in Table 5.12. The aspect which is usually measured by most MSMEs is employee work attendance. The other parameters relating to employee commitment are rarely measured.

Table 5.12: Average employee commitment performance measures

	Extent	Extent of measurement			sity of neter
	mean	median	mode	median	mode
Employee involvement in decision-making:					
Number of key decisions made by employees per given period	2.21	2	2	2	2
Job satisfaction:					
Level of staff morale	2.31	2	2	1	1
Level of performance related incentives	1.9	2	1	1	1
Level of staff motivation	2.15	2	2	2	2
Willingness to have unpaid overtime	1.78	2	1	1	1
Average for the variable	1.95				
Staff loyalty:					
Level of attendance at work	3.01	3	3	2	2
Level of willingness to go an extra mile	1.89	2	2	1	1
Level of labour turnover	2.37	2	2	2	2

	Extent	Extent of measurement			sity of meter
	mean	median	mode	median	mode
Number of training programmes initiated by employees	2.04	2	2	1	1
Number of training programmes attended by employees.	2.01	2	2	1	1
Average for the variable	2.26				

The results in Table 5.12 suggest that most owner/managers have the perception that extent of measurement and the level of performance measures for employee commitment are very low. The failure to measure and, therefore, monitor employee commitment by most MSMEs is a major cause for concern. Previous studies argue that employee commitment is a prerequisite for the success and survival of any enterprise (Bosch *et al.*, 2006; Krüger & Rootman, 2010; Ntalianis *et al.*, 2015). The perceived low levels of employee commitment parameters such as staff morale, willingness to have unpaid overtime and willingness to go an extra mile exhibited above are an indication that commitment may be low among the employees of most MSMEs. This may partly explain the poor performance of some of the MSMEs as suggested by previous studies (McKenna, 2005; Bartunek & Spreitzer, 2006).

5.2.2.3 Business planning

The study looked at business planning from the perspective of market planning, financial planning, strategic planning, and existence of formal policies and planning on future resources. Results of the responses are presented in Table 5.13.

Table 5.13: Business planning variables

	Ex	xtent of		sity of eter (%)			
Variable	Never	Rarely	Usually	Mostly	Always	Low	High
Marketing plan	11	29	53	5	2	42	58
Financial planning	9	43	42	5	1	33	67
Strategic planning	30	40	27	3	0	38	62
Formal policies	49	33	18	0	0	24	76
Future resources	56	30	11	2	1	34	66

Results suggest that the aspect of business planning that is evaluated by most of the MSMEs is marketing plan (60%) and the measurement of this aspect is considered to be high. Most MSMEs (70%) never or rarely evaluate the frequency of their strategic plan meetings and they perceive strategic planning to be high. The aspects that are never measured or evaluated by most MSMEs are the number of resources needed in future and the number of formal policies that guide decisions in operations. Considering these variables in total suggests that evaluation of business planning is limited in most of the MSMEs as most owner/managers (66%) indicated that they either do not measure or rarely measure the performance measurement parameters related to business planning.

Table 5.13 shows the average performance measurement practice and the owner/managers' perception on the level of the performance measurement parameters. The mean, median, and mode also confirm that the marketing plan is the most measured aspect and the resources required in the future are the least measured aspect.

Table 5.14: Business planning average performance measures

	Extent of measurement			Intensity of parameter		
	mean	median	mode	median	mode	
Marketing planning:						
Number of meetings where marketing plan is discussed	2.58	3	3	2	2	
Financial planning:						
Number of budget meetings/sessions held per given period	2.47	2	2	2	2	
Strategic planning:						
Number of strategic planning meetings/sessions held per given period	2.06	2	2	2	2	
Formal policies:						
Number of formal policies guiding decisions	1.68	2	1	1	1	
Future resources:						
consideration of future resources required	1.63	1	1	1	1	

The results in Table 5.14 indicate that the extent of measurement of market planning and financial planning was perceived to be high by most MSMEs. The extent of measurement of planning for future resources and formal policies guiding business decisions was perceived to be low. It is encouraging to note that most owner/managers perceived the level of most business planning variables to be high, even though the extent of measurement of some of these variables was low. Available evidence indicates the existence of a clear relationship between level of business planning and success and survival of MSMEs (Foreman-Peck *et al.*, 2006; Jayawarna *et al.*, 2007; Mazzarol *et al.*, 2009).

Most owner/managers indicated that they never or rarely measure business planning variables such as strategic planning, formal policies and the enterprise's need for future resources and this may be due to the fact that these variables are not easy to

measure and monitor. Previous studies indicate that performance measurement may influence managers to establish strategic plans for their enterprises (Ahmad *et al.*, 2015; Pekkola *et al.*, 2016). Most of the MSMEs which do not measure performance have reactive approach to business characterised by poor strategic planning and an informal process of making decisions as well as short-term orientation (Garengo *et al.*, 2005).

5.2.2.4 Management of information critical success factor

The aspects of information management focused on in this study are information relating to performance of different products in existing markets, performance of different products in new markets, the enterprise's customers, the enterprise's competitors, the enterprise's suppliers, regulatory authorities, the enterprise's sources of finance and information communication technology integration. Table 5.15 shows results of the owner/managers' responses on the extent of measurement and the level of the performance measurement parameters.

Table 5.15: Information management variable

Martal I.	E	xtent o	Intensity of parameter (%)				
Variable	Never Rarely	Usually	Mostly	Always	Low	High	
Information on performance of products in the existing markets	25	28	38	7	4	50	50
Information on performance of products in new <i>markets</i>	13	26	53	7	1	45	55
Information on the enterprise's customers	5	27	58	10	0	46	54
Information on the enterprise's competitors	25	39	33	2	1	37	63
Information on the enterprise's suppliers	9	25	58	7	1	39	61
Information on regulatory authorities	43	39	17	1	0	38	62

	E	xtent o	nt	paraı	sity of meter %)		
Variable	Never	Rarely	Usually	Mostly	Always	Low	High
Information on the enterprise's sources of finance	49	32	17	1	0	40	60
Information communication technology integration	67	26	7	0	0	45	55

Results indicate that the information that is usually gathered and reported by most MSMEs relates to performance of products in existing markets, performance of products in new markets, the enterprise's customers and the enterprise's suppliers. The amount of information gathered on all these aspects was perceived to be high. The fact that most MSMEs assess and monitor the gathering and reporting of such information is a positive development as extant literature suggests that the management of market intelligence information on customers, suppliers, and competitors makes it possible for MSMEs to explore new opportunities resulting in an improvement in business performance (Georgellis *et al.*, 2000; Keskin, 2006; Ndubisi & Iftikhar, 2012 Guo *et al.*, 2013).

However, information on the enterprise's competitors is rarely gathered and reported while that on regulatory authorities and enterprise's sources of finance is never gathered and reported. This information is also of strategic importance and failure to gather and monitor it has a negative impact on the performance of the enterprise. Gathering of strategic information is reported to be vital for the success and survival of an enterprise (Bengesi & Le Roux, 2014; Zerfass & Winkler, 2016). Putting all these variables into perspective would suggest that management of information is limited, although a significant proportion of respondents indicated that they usually gather and report information on these variables and perceive it to be high. Table 5.16 presents the average responses on the extent of measurement and perceived levels of the performance measures that define the information management critical success factor.

Table 5.16: Information management average performance measures

	Extent of measurement			Intensity of parameter		
	mean	median	mode	median	mode	
Frequency of gathering and reporting market information relating to the enterprise's competitors	2.14	2	2	2	2	
Frequency of gathering and reporting information on the performance of different types of products in the market	2.39	2	3	2	2	
Frequency of gathering and reporting information on the performance of products in different markets	2.57	3	3	2	2	
Frequency of gathering and reporting information relating to the enterprise's customers	3	3	3	2	2	
Frequency of gathering and reporting market information related to regulatory authorities	1.76	2	1	2	2	
Frequency of gathering and reporting market information relating to the enterprise's suppliers	2.67	3	3	2	2	
Frequency of gathering and reporting market information relating to the enterprise's sources of finance	1.71	2	1	2	2	
Level of integration of information and communication technologies in the business activities	1.40	1	1	2	2	

The measures of central tendency presented in Table 5.16 confirm that the information that is gathered and reported to a larger extent is on performance of different products in existing market, performance of different products in new markets, the enterprise's customers and the enterprise's suppliers. Information on regulatory authorities, the enterprise's sources of finance and information communication technology integration is to a larger extent rarely or never gathered and reported by most MSMEs. However, most owner/managers have a perception that level of information on the information management parameters included in this

study is very high even though the extent of measurement of the information is generally low.

5.2.2.5 Innovation Critical Success Factor

Innovation in this study is defined by aspects such as existence of new or enhanced products, services and process, new markets, new abilities and the enterprise's level of research and development. Table 5.17 presents composite responses for the variables that define innovation. The results in Table 5.16 suggest that most MSMEs never or rarely measure these variables. In spite of not being measured, the levels of almost all the parameters defining innovation were perceived to be high.

Putting together the responses for all the variables defining the innovation critical success factor suggests that innovation is to a larger extent never or rarely assessed by most MSMEs but perceived to be high. If the level of innovation is indeed high as perceived by most owner/managers, then that is encouraging as previous studies suggest a positive relationship between the enterprise's level of innovation and business performance (Forsman & Temel, 2011; Al-Ansari *et al.*, 2013; Kotey, 2014; Faherty & Stephens, 2016). However, there is need for scepticism where the owner/managers indicate that they never or rarely measure a given performance measure and they perceive the measure to be high. There is an argument that only that which gets measured gets attention (Cocca & Alberti, 2010). One may also need to take caution from Simpson *et al's.*, (2012) argument that conclusions drawn from the perceptions of owner/managers who will have responded through self-report questionnaires as data collection instruments may not be reliable. In this study most of the questionnaires were completed by the researcher which made the data collection instrument appear more like a structured interview.

Table 5.17: Innovation variables

Variable		ent of ı	(%)	parai	sity of meter %)		
Variable	Never	Rarely	Usually	Mostly	Always	Low	High
Product/service innovation	34	39	23	4	0	46	54
Process innovation	32	33	29	4	2	37	63
Position innovation	29	33	20	8	10	30	70
Focusing on new abilities	35	26	33	5	1	40	60
Research and development activities	44	26	26	3	1	29	71

Table 5.18 shows the measures of central tendency for the individual measures which make up the above variables. The averages generally confirm that measurement of most aspects of innovation is limited although the level of the aspects is perceived to be high. The least measured aspects are number of new managerial systems.

Table 5.18: Innovation average performance measures

	Extent of measurement			Intensity of parameter	
	Mean	Median	Mode	Median	Mode
Product/service innovation	1	1			
Number of new products introduced into the market per given period	2.09	2	1	2	2
Number of new services introduced per given period	2.04	2	1	2	2
Number of existing services/processes modified	2.89	2	1	2	2
Number of products supplied in new packaging tailor made for the enterprise (i.e. branding)	1.86	2	2	2	2
% of turnover from new products introduced per given period	2.08	2	2	2	2
Variable composite score	1.99				
Process innovation					
Number of new ways of operating introduced	2.06	2	2	2	2
Amount of resources committed to operational innovations	2.65	3	3	2	2
Number of new technologies used during the period	1.80	2	1	2	2

	Extent of measurement			Intens paran	
	Mean	Median	Mode	Median	Mode
Variable composite score	2.10				
Position innovation:					
Number of new markets developed for existing products	2.08	2	2	2	2
Number of new promotional campaigns	2.47	2	1	2	2
Amount of resources invested in developing and exploiting new brands	2.83	2	1	2	2
Variable composite score	2.36				
Focusing on new abilities:					
Number of new skills developed per given period	2.03	2	2	2	2
Number of innovation meetings held per given period to produce new ideas for products and technologies	2.32	2	3	2	2
Number of new managerial systems	1.50	1	1	1	1
Number of new ideas generated	2.32	2	3	2	2
Amount of time devoted to developing new ideas	2.21	2	2	2	2

	Extent of measurement			Intensity of parameter		
	Mean	Median	Mode	Median	Mode	
Number of new ideas tested on the market	2.18	2	3	2	2	
Variable composite score	2.09					
Research and development activities:						
Level of research and development activities per given period	1.96	2	1	2	1	
Number of new processes/services developed or improved from research and development activities	1.87	2	1	2	1	
Number of new markets developed from research and development activities	1.91	2	1	2	2	
Variable composite score	1.91					

It can be seen from Table 5.18 that the extent of measurement and intensity of research and development activities is very low. This is undesirable because the level of research and development the key driver of level of innovation (Baregheh *et al.*, 2012; Taschner, 2016).

5.2.2.6 Enterprise resources critical success factor

The resources focused on in this study under enterprise resources are intangible resources, tangible resources, human resources and financial resources. It can be seen from Table 5.19 that most MSMEs never measure the amount of intangible assets they possess. Most of the MSMEs usually focus their attention on tangible assets and the level of these assets is perceived to be high. Generally, intangible assets such as goodwill are difficult to ascertain. However, intangible assets such as brand equity, business relationships, designs, and patterns can be ascertained easily. Similarly, the number of key employees, knowledge, and skills in an enterprise are ordinarily not difficult to ascertain.

Table 5.19: Enterprise resources variables

V. J. I.	Ext	ent of r	(%)	parai	sity of meter %)		
Variable	Never	Rarely	Usually	Mostly	Always	Low	High
Intangible resources	62	31	7	0	0	39	61
Tangible assets	8	29	57	5	1	36	64
Human resources	25	30	39	5	1	39	61
Financial resources	25	35	33	4	3	35	65

The results in Table 5.19 suggest that the extent of measurement of enterprise resources is very low if all the variables relating to resources are put together. However, most of the respondents were of the view that the level of the resources is generally high. Assuming that the owner/managers' perception that the level of enterprise resources is high is not biased, the enterprise's pool of resources is not one of the factors negatively affecting the performance of retail MSMEs in Zimbabwe. This is contrary to extant literature which holds that lack of resources is often the major causes of poor business performance and, therefore, failure of MSMEs (Kohlbacher & Gruenwald, 2011; Ratnatunga *et al.*, 2004; Shirokova *et al.*, 2013). Previous studies also suggest that the level of intangible assets enable MSMEs to be more competitive as they are not easy to replicate (Ratnatunga *et al.*,

2004; Blackburn *et al.*, 2013; Kotey 2014; Tan *et al.*, 2014). Financial resources in the form of working capital are key to the success of MSMEs. It is, therefore, encouraging to note that a significant proportion (65%) of MSMEs reported that the level of working capital in their enterprises was high. This may suggest that working capital was not lacking in most MSMEs and some MSMEs may have performed badly despite having adequate working capital.

The results on enterprise resources presented in Table 5.20 reveal that intangible resources are never measured and tangible assets are the most measured variable.

Table 5.20: Enterprise resources average performance measures

	Measures of central tendency							
Measures		xtent c	Intensity of parameter					
		Median	Mode	Median	Mode			
Level of intangible assets per given per given period	1.45	1	1	2	2			
Level of key tangible assets per given period	2.62	3	3	2	2			
Number of key employees per given period	2.26	2	3	2	2			
Level of net working capital per given period	2.23	2	2	2	2			

The results in the Table 5.20 also reveal that most owner/managers who responded to the questionnaire had a perception that the level of the parameters defining enterprise resources is high. This is in contrast to the commonly held belief that the performance of most enterprises is hindered by shortage of resources (Ratnatunga *et al.*, 2004).

5.2.2.7 Customer management critical success factor

The responses of owner/managers shown in Table 5.21 suggest that most MSMEs never or rarely measure or pay attention to customer management variables. Failure to measure variables relating to customers suggests that the MSMEs do not manage their customers adequately as Salaheldin (2009) indicated that you cannot manage what you cannot measure. MSMEs seem not to pay attention to variables relating to

customer retention and market share. This is against the advice of Azmat and Samaratunge (2013) who strongly stressed the need for MSMEs to manage their customers through developing customer loyalty and trust which eventually leads to customer retention. Measuring and managing the number of repeat purchases from customers per any given period and number of regular customers lost per any given period is the best measure of customer retention and customer loyalty respectively (Laukkanen *et al.*, 2014; Lampadarios 2016).

Table 5.21: Customer management variables

Extent of measurement (%) Variable						Intensity of parameter (%)	
	Never	Rarely	Usually	Mostly	Always	Low	High
Customer focus	37	35	23	4	1	52	48
Customer loyalty	53	28	16	3	0	53	47
Customer retention	59	24	17	0	0	22	78
Market share	34	22	34	9	1	59	41
Customer satisfaction	37	36	23	4	0	33	67
Market reputation of the enterprise	45	33	19	2	1	49	51
Long term customer relationship	49	32	17	2	0	45	55
Customer base	32	25	37	6	0	51	49
Customer service	40	30	26	3	1	47	53
Market responsiveness	32	22	43	3	0	47	53
Combined response for the CSF	40	30	25	4	1	47	53

The results in Table 5.22 also confirm that most owner/managers of MSMEs, either never or rarely measure most variables on customer management. The customer management variables that seem to be measured to a larger extent and, therefore, managed better than other variables are those to do with market responsiveness and

customer base. The measures for these variables are number of customer complaints per given period, number of customers per given period and number of changes made in response to changes in the market. Customer base may be viewed as backward looking while customer responsiveness is forward looking. It is, therefore, encouraging to note that most MSMEs are forward looking and likely to meet future needs of customers as envisaged by Lambert and Knemeyer (2007).

 Table 5.22: Customer management average performance measures

	Extent of measurement				sity of meter
	Mean	Median	Mode	Median	Mode
Customer focus:					
Frequency of monitoring changes in customer needs	1.98	2	1	1	1
Frequency of surveys to get feedback from customers per given period	1.89	2	1	1	1
variable composite score	1.94				
Customer loyalty:					
Number of repeat purchases from customers per given period	1.70	1	1	1	1
Customer retention:					
Number of regular customers lost per given period	1.59	1	1	2	2
Market share					
Change in sales volume of each product per given period	2.20	2	1	1	1
Customer satisfaction					
Level of suggestions from customers	1.90	2	1	2	2
Number of customer complaints per given period	2.02	2	2	2	2

	Extent of measurement			Intensity of parameter		
	Mean	Median	Mode	Median	Mode	
Combined response for the variable	1.88					
Market reputation of the enterprise						
Number of customers referred to the enterprise by other customers or potential customers at any given time	1.80	2	1	2	2	
Long term customer relationship						
Number of years a customer has been buying from the enterprise	1.71	2	0	2	2	
Customer base:						
Number of customers per given period	2.28	2	3	2	2	
Number of customers per full time employee	2.04	2	1	1	1	
Combined response for the variable	1.96					
Customer service:						
Average number of after sale support services per customer per given period	1,94	2	1	2	2	
Market responsiveness:						
Number of changes made in response to changes in the market	2.18	2	3	2	2	

The perception of most of the owner/managers was that the performance measurement variables defining customer management CSF are high. The intensity of most of these variables had median and mode values of 2 in table 5.22 and a value of 2 represents a high level on the intensity scale while a value of 1 represents a low level. The parameters which were perceived to be low are frequency of monitoring changes in customer needs, frequency of surveys to get feedback from customers per given period, number of repeat purchases from customers per given period, change in sales volume of each product per given period and number of customers per full time employee. This may be contributing to poor performance of

some of the MSMEs as all these variables have been regarded in previous studies as key in enhancing business performance and survival of MSMEs (Lambert & Knemeyer, 2007; Azmat & Samaratunge, 2013; Shi & Yu, 2013).

5.2.2.8 Competitor management success factor

The results in Table 5.23 reveal that most of the owner/managers indicated that they never measure or rarely measure variables relating to management of competition. The levels of parameters for almost all competitor management variables are perceived to be low.

Table 5.23: Competitor management variables

Variable	Ext	tent of	Intensity of parameter (%)				
	Never	Rarely	Usually	Mostly	Always	Low	High
Knowledge of the enterprise's competitors	22	42	30	5	0	71	39
Knowledge of the competitor's business	36	33	26	3	2	66	44
Taking advantages of the competitor's weaknesses	51	27	17	4	1	73	27
Existence of external benchmarking	52	29	15	2	2	62	38
Changes based on external benchmarking	52	30	15	2	1	71	39
Competitor's market share	57	28	12	2	1	65	35

The failure to measure the variables relating to competition is not health for the MSMEs as Miles (2012) argue that management of the enterprise's competitors is necessary for the success and long term survival of an enterprise. Table 5.24 presents data on the extent of measurement and level of performance measurement parameters relating to competitor management. All the competitor management

performance measurement parameters were perceived as low and this is reflected in Table 5.24.

Table 5.24: Competitor management average performance measures

		tent of sureme		Intensity of parameter				
Performance measures	Mean	Median	Mode	Median	Mode			
Knowledge of the enterprise's competitors:								
Number of competitors per given period	2.30	2	2	1	1			
Number of new entrants per given period	2.26	2	2	1	1			
Number of exits per given period	2.03	2	2	1	1			
Variable composite score	2.20							
Knowledge of the competitor's business:								
Competitors' product range per given time	2.04	2	1	1	1			
Taking advantages of the competitor's weakn	esses:							
Extent to which the enterprise takes advantage of the competitors' weaknesses	1.78	1	1	1	1			
Existence of external benchmarking:								
Number of exercises to compare the enterprise's activities with those of best performing competitor enterprises	1.71	1	1	1	1			
Changes based on external benchmarking:								
Number of changes effected as a result of the enterprise's benchmarking activities at any given period	1.71	1	1	1	1			
Competitor's market share:								
Number of competitors' per given period	1.76	2	1	1	1			
Competitors' fast moving goods per given period	1.54	1	1	1	1			
Competitors' slow moving goods per given period	1.53	1	1	1	1			
Variable composite score	1,60							

It can be seen in Table 5.24 that most owner/managers indicated that performance measures such as extent to which the enterprise takes advantage of the competitors' weaknesses, number of exercises to compare the enterprise's activities with those of best performing competitors, number of changes effected as a result of the enterprise's benchmarking activities at any given period and competitors' fast and slow moving goods per given period are never measured. It can be seen from Table 5.24 that the perception of most owner/managers was that the performance measurement parameters relating to competitor management are low across all the competitor management variables. Failure to assess and monitor the above measures by most MSMEs means that these MSMEs are denying themselves the opportunity to improve their processes in relation to their competitors. Benchmarking is a catalyst for continuous improvement and may enable an enterprise to be always ahead of its competitors (Tucker & Pitt, 2009; Laukkanen *et al.*, 2013; Taschner, 2016).

The performance measures which seemed to get some attention from most MSMEs are those concerned with knowledge of the enterprise's competitors. These measures are number of competitors per given period, number of new entrants per given period and number of exits per given period. These measures allow the MSMEs to assess their market position relative to competitors. This scanning of the business environment and close monitoring of the activities of competitors particularly focusing on their strengths and weaknesses has been found to provide impetus for sustainable growth in MSMEs (Keskin, 2006; Ndubisi & Iftikhar, 2012).

5.2.2.9 Supplier management success factors

Results in Table 5.25 suggest that most MSMEs rarely measure all the variables defining supplier management and the owner/managers perceive the level of these variables to be low. Management of suppliers is reported as low due to the fact that most of the MSMEs in Zimbabwe import their goods for resale on a cash basis and do not maintain a close and sustainable relationship with their suppliers. Failure to develop a close relationship with suppliers is likely to have a negative impact on the performance of MSMEs as previous studies assert that enterprises should develop a relationship with their suppliers for them to achieve a competitive advantage and long term organisational performance (Tari et al., 2007; Talib et al., 2014).

Table 5.25: Supplier management variables

Variable _		ent of ı	(%)	parai	sity of meter %)		
Variable	Never	Rarely	Usually	Mostly	Always	Low	High
Relationship with supplier	29	40	27	4	0	61	39
Delivery period	25	38	29	6	2	82	18
Discounts received	34	41	19	2	4	44	56

Table 5.26 presents the averages for the performance measures and reveals that the supplier management variables are rarely measured and are perceived to be low. Failure to manage relationship with suppliers is often cited as one of the factors contributing to the poor performance of MSMEs (Talib *et al.*, 2014; Liao & Barnes, 2015).

Table 5.26: Supplier management average performance measures

		xtent c	Intensity of parameter		
Performance measures		Median	Mode	Median	Mode
Relationship with supplier:					
Number of meetings held with suppliers per given period	2.28	2	2	1	1
Percentage of trade credit per given period	1.88	2	1	2	2
Variable composite score	1.81				
Delivery period:					
Average time taken by supplier to deliver goods after placing an order	2.21	2	2	2	2
Discounts received					
Level of discounts received	2	2	2	1	1

Results in Table 5.26 reveal that most owner/managers perceive the level of supplier management performance measurement parameters such as number of meetings held with suppliers per given period and level of discounts received as low. Therefore, it seems that supplier management is not getting adequate attention.

5.2.2.10 Management of regulators success factor

The regulators which were considered in this study are tax authorities, local authorities (city councils), industry associations, and monitoring bodies. It can be seen in Table 5.27 that most owner/managers indicated that they do not measure their compliance to city by-laws, industry associations' best practices, and monitoring bodies' standards. However, it is encouraging to note that a number of owner/managers reported that they assess their level of compliance to tax laws. However, there may be a possibility that some owner/managers of MSMEs which do not comply with the tax laws misrepresented their extent of measurement and level of tax compliance due to the fear of being handed over to the tax authorities. This is because these results are at variance with the findings of Utaumire, *at al.* (2013) and Nyamwanza *et al.* (2014) who indicated that a considerable number of MSMEs in Zimbabwe face closure every year when the Zimbabwe Revenue Authority fines them heavily for failing to comply with various tax laws of the country.

Table 5.27: Management of regulators variables

Variable	Ext	ent of ı	Intensity paramete				
variable	Never	Rarely	Usually	Mostly	Always	Low	High
Tax compliance	27	19	30	18	6	51	49
Compliance to city by-laws	42	36	21	1	0	44	56
Compliance to industry associations	42	45	12	1	0	45	55
Compliance to monitoring bodies.	49	42	9	0	0	33	67

As can be seen in Table 5.28, tax compliance is the only variable which most owner/managers indicated that they pay attention to. Most MSMEs revealed that

they never measure or rarely measure their compliance to city by-laws, industry associations, and regulatory bodies' standards.

Table 5.28: Regulator management average performance measures

		xtent o		Intensity of parameter		
Performance measures	mean	median	mode	median	mode	
Tax compliance:						
Number of times the enterprise is penalised by tax authorities	2.57	3	3	1	1	
Number of times the enterprise pays tax by the due date	2.59	3	3	2	2	
Combined response for the variable	2.58					
Compliance to city by-laws:						
Number of times the enterprise is penalised by city authorities	1.82	2	1	2	2	
Number of times the enterprise pays licence fees by the due date	1.84	2	1	1	1	
Combined response for the variable	1.83					
Compliance to industry associations:						
Number of industry associations the enterprise is a member of	1.72	2	2	2	1	
Compliance to monitoring bodies:	•					
Number of times the enterprise is penalised by a monitoring board	1.60	2	1	2	1	

5.2.2.11 Management of sources of finance success factor

The results in Table 5.29 show that most MSMEs indicated that they usually measure the resources contributed by the owners of the enterprise and the retained earnings. The level of these resources was perceived to be either low or high with no meaningful difference between the number of respondents who indicated either low

or high. Results also suggest that most MSMEs never or rarely measure credit from suppliers and loan from financial institutions. Probably the failure to pay attention to sources of finance such as loan and trade credit is due to the enterprises' failure to access loans from financial institutions and trade credit from suppliers. As a result, most MSMEs generally buy on cash basis. However, although access to finance is important for success of MSMEs, previous studies reveal MSMEs which have been successful despite limited access to finance (Masocha & Charamba, 2014). Considering all the sources of finance, results in Table 5.29 seem to suggest that most MSMEs do not assess their level of management of sources of finance. The few owner/managers who somehow measure performance had the perception that the performance measurement parameters for management of sources of finance were generally high.

Table 5.29: Management of sources of finance variables

Extent of measurement (%) Variable					Intensity of parameter (%)		
Variable	Never	Rarely	Usually	Mostly	Always	Low	High
Contributed by owner	4	35	49	7	5	50	50
From retained profits	4	38	46	9	3	47	53
Credit from suppliers	38	37	20	3	2	29	71
Level of loan	31	45	17	5	2	38	62

The measures of central tendency presented in Table 5.30 also confirm that most MSMEs usually measure the percentage of finance contributed by owners and from retained earnings. It can also be deduced from Table 5.30 that most MSMEs rarely assess the number of times the enterprise is penalised for late payment of credit, level of early settlement discounts received from suppliers, number of times the enterprise fail to pay interest on time and the percentage of loan finance at any given period. Failure to repay loan instalments on time is often cited as one of the factors that lead to failure of MSMEs (Mabhungu *et al.*, 2011; Ramukumba, 2014).

Table 5.30: Management of sources of finance average performance measures

		Extent o		Intensity of parameter		
Performance measures	Mean	Median	Mode	Median	Mode	
Owner contribution:						
Percentage of finance contributed by owners	2.74	3	3	1	1	
Retained earnings:						
Percentage of finance from retained earnings	2.70	3	3	2	2	
Credit from suppliers:						
Number of times the enterprise is penalised for late payment of credit	1.87	2	1	2	2	
Level of early settlement discounts received from suppliers	2.05	2	2	2	2	
Variable composite score	2.35					
Loan:						
Number of times the enterprise fail to pay interest on time	1.73	2	1	2	2	
Percentage of loan finance at any given period	2.24	2	2	1	1	
Perhaps Variable composite score	2.0					

The data in Table 5.30 indicates that generally most owner/managers do not measure the parameters of performance related to management of sources of finance CSF although they are of the view that the parameters are high. Perhaps the owner/managers were not familiar with the measurement of the performance measures being investigated in this study. Previous studies highlights the importance of managing sources of finance (Stokes & Wilson, 2006; Olawale & Garwe, 2010; Ramukumba, 2014).

5.2.2.12 Cost management variables critical success factor

The results in Table 5.31 suggest that most MSMEs usually manage operating costs and do not pay much attention to inventory control, transaction costs, and bad debts. The fact that most MSMEs do not assess and probably monitor such costs is an unwelcome development since previous studies have indicated that cost control is a critical success factor in any enterprise (Drury, 2004; neely, 2007). Some authors argued that one of the primary means of improving an enterprise's profitability is to control costs, mainly inventory and store expenses (Biggart *et al.*, 2010; Afonso & Cabrita, 2015; Taschner, 2016).

Most owner/managers had the perception that the operating and transaction costs as well as level of bad debts were generally high in their MSMEs. This may partly explain the low profitability reported by some MSMEs. For example, Laitinen (2011) found that cost cutting measures applied by a struggling company during a scheme of business reorganisation can result in performance improvement and, therefore, recovery of the business. Combing all variables that define cost management, it seems most MSMEs usually measure cost management variables.

Table 5.31: Cost management variables

	Ext	ent of ı	Intensity of parameter				
Variable	Never	Rarely	Usually	Mostly	Always	Low	High
Inventory control	24	34	34	5	3	50	50
Level of operating costs	18	25	48	6	3	47	53
Level of transaction costs	36	34	27	1	2	29	71
Level of Bad debts	52	28	19	0	1	38	62

The variables in Table 5.31 are unpacked in Table 5.32 in order to closely analyse the extent of measurement and levels of the parameters that make up the variables.

Table 5.32: Cost management average performance measures

		xtent o		Intensity of parameter		
Performance measures	Mean	Median	Mode	Median	Mode	
Level of reduction in inventory costs:						
Percentage of inventory pilferage per given period	2.29	2	2	2	2	
Percentage of inventory which goes bad from each batch of inventory purchases	2.15	2	2	2	2	
Level of costs of ordering and holding stock	2.39	2	3	2	2	
Variable composite scores	2.32					
Levels of reduction in operating costs:						
Level of transport costs	2.51	3	3	2	2	
Level of salaries and wages	2.87	3	3	2	2	
Level of electricity costs	2.30	2	3	2	2	
Level of cost of city council bills (water and rates)	2.15	2	1	2	2	
Level of communication expenses (telephone, cell phones and internet)	2.68	3	3	2	2	
Variable composite score	2.51					
Level of reduction transaction costs:						
Level of cost of discounts offered to customers	1.98	2	2	1	1	
Level of discount forgone from suppliers	1.99	2	1	2	2	
Combined response for the variable	1.99					
Bad debts:						
Level of dad debts	1.70	1	1	1		

Inventory control in this study focused on the percentage of inventory pilferage per given period, percentage of inventory which goes bad from each batch of inventory purchased and level of costs of ordering and holding stock. Most (58%) of MSMEs rarely measure these costs and the levels of the costs are perceived to be high.

The operating costs considered for the study were level of transport costs, level of salaries and wages, level of electricity costs, level of cost of city council bills (water and rates) and level of communication expenses (telephone, cell phones and internet). Most MSMEs usually assess the level of reduction of these costs and the costs are perceived to be high. The variable that is never assessed has to do with level of bad debts.

5.2.2.13 Revenue management variables

Results in Table 5.33 indicate that most MSMEs always assess changes in the sales volume and they perceive the changes to be low. The practice of assessing changes in selling prices is generally low. However, when both variables are combined, results suggest that most MSMEs usually assess and manage the two variables related to revenue and the changes in these variables are low. The attempt at managing revenue is likely to result in efficient management of the enterprise's working capital. Ng *et al.* (2013) notes that revenue management is an area of management accounting which focuses on improving revenue and managing the enterprise's limited capacity by offering an affordable product or service at the right time and which meets the needs of the customers.

Table 5.33: Revenue management variables

Variable	Ext	ent of ı	(%)	paraı	sity of meter %)		
Variable	Never	Rarely	Usually	Mostly	Always	Low	High
Change in sales volume	6	22	59	7	6	70	30
Change in selling price	21	35	36	5	3	86	14
Combined response for the CSF	13	28	49	6	4	77	23

The measures of central tendency in Table 5.34 reveal the averages for the extent of measurement and the levels of the measures of revenue in order to increase clarity.

Table 5.34: Revenue management average performance measures

		ctent of	Intensity of parameter		
Performance measures	Mean	Median	Mode	Median	Mode
Percentage increase in sales volume per product per given period	2.84	3	3	1	1
Increase in selling price per given period	2.35	2	3	1	1

The extent of measurement of the parameters which define revenue management is high and the levels of the parameters are perceived to be low.

5.2.2.14 Profit critical success factor

The results in Table 5.35 indicate that most MSMEs usually assess their profitability and perceive it to be low. In terms of profitability ratios, results suggest that most MSMEs do not use profitability ratios to assess their performance. That is, most MSMEs do not assess profitability using the profitability measures adopted in this study.

The fact that most MSMEs measure level of profit is nothing to write home about from a performance measurement point of view. This is because profit is an end product and what is important is the means to an end. That is the measurement, management and monitoring of those factors which leads to higher profit is more important than the profit itself. Otley (2001) advocates for measurement of activities that drive performance rather than measurement of outcomes of performance. Therefore, MSMEs should focus on assessing and monitoring factors that lead to profitability rather than profitability itself (Meyer, 2002; Otley, 2007).

Table 5.35: Profit variables

Variable	Exte	Intensity of paramete (%)					
Variable	Never	Rarely	Usually	Mostly	Always	Low	High
Profit	8	24	52	15	1	63	37
Profitability ratios	44	34	21	1	0	61	39

Table 5.36 unpacks the responses on the profit and profitability ratio variables highlighted in Table 5.35. As can be seen from Table 5.36, increase in gross profit and net profit are usually measured by most MSMEs and the two profitability measures are perceived to be low. When it comes to profitability ratios, most MSMEs rarely assess the enterprise's net profit per employee, net profit per customer and return on assets. The profitability ratios return on investment and return on capital employed are never assessed by most MSMEs. Previous studies points that most MSMEs usually measure gross profit and net profit (Kaplan & Norton, 1992; Atkinson et al., 1997; Henri, 2004; Halabi *et al.*, 2010).

Table 5.36: Profit average performance measures

		xtent of		Intensity of parameter		
Performance measures	Mean	Median	Mode	Median	Mode	
Profit						
Increase in gross profit	2.49	3	3	2	2	
Increase in net profit	3.03	3	3	2	2	
Variable composite score	2.76					
Profit ratios						
Net profit per employee	1.92	2	2	2	2	

		xtent of sureme		Intensity o parameter		
Performance measures	Mean	Median	Mode	Median	Mode	
Net profit per customer	1.85	2	2	2	2	
Return on assets	2.28	2	3	2	2	
Return on in investment	1.54	1	1	1	1	
Return on capital employed	1.37	1	1	1	1	
Variable composite score	1.79					

The results in Table 5.36 indicates that most MSMEs had a perception that return on investment and return on capital employed were low in most MSMEs. Table 5.37 presents a summary of the average responses regarding the extent of measurement of the critical success factors and the levels of the critical success factors.

5.2.2.15 A comparison of extent of measurement of the CSFs

Table 5.37 gives the mean scores for extent of measurement of the CSFs.

Table 5.37: Extent of measurement of CSFs

Critical success factor	Range	Min	Max	Mean	Std. Dev
Management of revenue	4.00	1.00	5.00	2.4762	.80933
Owner/management commitment	3.21	1.00	4.21	2.3617	.58755
Management of customers	4.00	1.00	5.00	2.2222	.62008
Management of finance	3.50	1.00	4.50	2.1596	.62735
Employee commitment	3.10	1.20	4.30	2.1386	.56994
Resources	2.75	1.00	3.75	2.1362	.62123
Management of information	2.75	1.00	3.75	2.1257	.52458
Business planning	2.60	1.00	3.60	2.0751	.51948
Innovation	2.85	1.00	3.85	2.0437	.62994

Critical success factor	Range	Min	Max	Mean	Std. Dev
Management of suppliers	3.75	1.00	4.75	2.0198	.65887
Management of profit	2.14	1.00	3.14	2.0076	.41381
Regulators management	2.67	1.00	3.67	1.9621	.69288
Management of customers	2.50	1.00	3.50	1.9572	.61895
Management of competitors	2.90	1.00	3.90	1.8376	.61628

The responses of owner/managers regarding the performance measurement practice of most MSMEs suggest that there is very low measurement of the performance measures considered in this study. Most MSMEs rarely measure the performance of the critical success factors identified in the study. Failure to measure and, therefore, monitor and manage the enterprise's CSFs may be a contributing factor towards the failure of some of the MSMEs. Taticchi et al., (2010) point out that enterprises need to monitor and understand their performance in order for them to become competitive and survive. The average factor scores presented in Table 5.37 indicate that the profit CSF is rarely measured. This is unusual as previous studies indicate that profit is the most measured financial performance measure (Henri, 2004; Halabi et al., 2010; Blackburn et al., 2013; Gerba & Viswanadham, 2016). However, the extent of measurement of the profit CSF was low because of the influence of number of profitability ratios considered under this factor whose extent of measurement was low. Otherwise profit measures like increase in gross profit and net profit were reported as being usually measured. The researcher also observed that most MSMEs had records on net profit for the previous three years.

The next section presents the results of exploratory factor analysis conducted to come up with factors which are the basis for further analyses conducted during the process of developing a performance measurement framework.

5.2.3 SELECTION OF PERFORMANCE MEASURES FOR THE FRAMEWORK

This section involves selection of the performance measures which should become part of the proposed performance measurement framework. The first part of the selection process involved exploratory factor analysis. The exploratory factor analysis was conducted in order to validate the performance measurement

questionnaire administered to owner/managers. The performance measurement questionnaire used in this study was developed based on literature review and was not validated. Therefore, exploratory factor analysis was conducted in order to identify the performance measurement factors to emerge from the empirical study. Thus, the CSFs developed through literature review and analysed in section 5.2.4 were all dropped in this analysis and factor analysis was then carried out in order to come up with new factors based on empirical study.

The second part of the selection process was concerned with testing the reliability of the items for each factor which emerged from the factor analysis. Only reliable performance measurement items were retained in each factor. The third part of the selection process involved computation of factor scores for each factor. The last part of the selection process involved selection of those factors (CSFs) which had a statistically significant relationship with level of profit and number of years the MSMEs had been in operation. Stepwise multiple linear regression analysis was conducted to select the factors. The relationship between the CSFs was tested using Spearman correlation test.

5.2.3.1 Exploratory factor analysis

Principal component analysis with varimax rotation was conducted in order to identify the underlying components for the items of the performance measurement questionnaire administered to 189 owner/managers of retail MSMEs. Principal component analysis was used to reduce the number of performance measures so that the performance measurement framework to be developed in this study consists of few CSFs and key performance measures. Composite scores were computed for the identified factors underlying the performance measurement in retail MSMEs.

The data was tested for sampling adequacy and it was found that the sample is factorable. The Kaiser-Meyer-Olkin measure of sampling adequacy was .767, above the minimum acceptable values of 0.50 to 0.60 (Ryan, 1995; Pallant, 2013) and Bartlett's test of sphericity was significant (χ^2 (7626) = 16809.203, p < .001). Thus, the assumption of independent sampling was met and the sample size was adequate despite the very high number of variables exposed to factor analysis in this study. Some literature suggests that factor analysis can be carried out as long as the sample size has 51 more cases than the number of variables (Lawley & Maxwell,

1971), there are at least 150 - 300 cases (Hutcheson & Sofroniou, 1999) and if the factors have four or more items with loadings of 0.60 or higher (Beavers, Lounsbury, Richards, Huck, Skolits & Esquive, 2013). Beavers *et al.* (2013) also point out that a sample size of at least 150 is adequate where the factors have 10 to 12 items that load moderately (.40 or higher). The communalities were all above .3, further confirming that each item shared some common variance with other items.

The number of factors for the exploratory factor analysis was fixed at 13 resulting in a 12 factor solution, explaining 53% of the variance. The 12 factor solution was preferred because of its theoretical support and the insufficient number of primary loadings in the 13th factor and difficulty of interpreting subsequent factors. The minimum loading for each item was set at 0.40. The exploratory factor analysis initially conducted, where the choice of factors was based on having an Eigen value above 1, resulted in 18 factors with at least three variable items and 15 factors with two or less variable items and a percentage of variance of 75%. There was generally no problem of cross-loading. The 15 factors with two or less variables did not qualify to be retained as factors. However, the 18 factors were very difficult to interpret and did not have a stable structure. The factor analysis was repeated for several factors from 33 factors down to 13 factors. The number of factors was finally fixed at 13, based on the assumption that there are around 14 factors as envisaged during the review of literature. That is, the 13 factors were extracted in order to establish if the factors in the questionnaire could be identified during the exploratory factor analysis exercise. However, the 13 factor extraction resulted in only ten interpretable factors as shown in Table 5.38. Table 5.38 displays the items and factor loadings for the rotated factors, with loadings less than .40 omitted to improve clarity. The performance measures (variables) with factor loadings below .40 were also omitted.

Table 5.38: Rotated factor pattern and final communality estimates

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	com
E16	.764													.688
E18	.740													.702
E19	.739													.659
E15	.732													.672
E13	.705													.604
E17	.695													.582
E12	.677													.538
E20	.656													.619
E6	.628													.597
E11	.600													.495
E14	.561													.452
E3	.538													.622
E2	.514													.653
E8	.465													.424
E5	.463													.500

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	com
E9	.441													.398
E7	.439													.424
E10	.422													.405
L9		.613												.615
L6		.604												.569
L11		.603												.529
L10		.592												.573
L8		.576												.507
L7		.544												.516
L5		.521												.562
L4		.508												.577
N1		.453												.609
L3		.448												.484
L1		.403												.613
A12			.680											.590
A13			.669											.556

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	com
A11			.638											.534
A15			.620											.595
A14			.599											.534
A16			.566											.535
A17			.559											.490
A7			.530											.472
A19			.509											.486
A9			.462											.436
A5			.447											.465
A10			.444											.438
A4			.429											.472
A3			.403											.492
G5				.688										.692
G3				.683										.559
G4				.630										.597
G2				.619										.597

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	com
G6				.595										.579
G1				.569										.519
G8				.531										.542
G 7				.516										.634
i2				.416										.466
H11					.694									.640
H12					.692									.534
H10					.640									.625
H6					.596									.643
H4					.560									.474
H7					.554									.543
H5					.546									.492
H8					.544									.474
H9					.466									.476
Н3					.465									.475
H1					.444									.594

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	com
K3						.672								543
K2						.643								603
K1						.608								532
K5						.599								521
D8						.556								563
G9						.548								644
G10						.522								625
K6						.496								569
K4						.455								530
D2							.666							.548
D3							.666							.565
D5							.658							.557
D4							.555							.514
B1							.454							.641
B7							.446	•						.494
B4								.581						.562

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	com
B5								.577						.548
B10								.496						.464
В3								.480						.504
В9								.429						.497
B2								.421						.618
A18								.418						.490
B8								.415						.539
J1									.740					.674
J2									.733					.638
J6									.641					.567
J3									.632					.664
J4									.565					.664
J5									.487					.597
F4										.483				.483
C5										.454				.376
F1										.451				.412

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	com
C1										.417				.416
N2											.705			.636
В6											.598			.464
F3										.405	.413			.483
N7												.638		.467
N6												.600		.530
i3												.440		.506
N3													.452	.474

Extraction Method: Principal Component Analysis

Table 5.39 identifies the item codes presented in Table 5.38 and the names proposed for each factor. The colours are meant to match the item codes in Table 5.38 to the item names in Table 5.39.

Table 5.39: Key for the performance measurement items presented in Table 5.38

Codes for items in rotated factor analysis - Table 5.38					
F1: INNOVATION	F5: CUSTOMER MANAGEMENT				
E16_amount of time devoted to new ideas	H11_no. of after sale support services per customer per given period				
E18_level of research and development activities	H12_no. of changes in response to market changes				
E19_no. of new services/processes from R & D	H10_no. of customers per full time employee per given period				
E15_no. of new ideas generated	H6_no. of customer complains per given period				
E13_no. of innovation meetings held	H4_ change in sales volume of each product per given period				
E17_no.of new ideas tested in market	H7_no. of customer referred by other customers per given period				
E20_no. of new markets from R & D	H5_no of suggestions from customers				
E12_no. of new skills developed	H8_no. of years a customer purchased from enterprise				
E6_no. of new ways of operating	H9_no. of customers per given period				
E11_amount resources developing new brands	H3_no. of regular customers lost per given period				
E3_no. of products with new company packaging	H1_no. of surveys to get customer feedback per given period				
E14_no. of new managerial systems	F6: MANAGEMENT OF SOURCE OF FINANCE				
E2_no of new services introduced	K3_no of times the enterprise is penalised for late payment of credit per given period				
E5_ No. of existing services modified	K2_% of finance from retained earnings per given period				
E7_amt of resources committed to	K1_% of finance contributed by owners				

Codes for items in rotated factor analysis - Table 5.38					
innovation	per given period				
E8_no. of new technologies used	K5_no. of times enterprise fail to pay interest on time per given period				
E9_no. of new markets for existing products	D8_level of ICT integration per given period				
E10_no. of new promotional campaigns	G9_competitors' fast moving goods per given period				
F2: COST MANAGEMENT	G10_competitors' slow moving goods per given period				
L9_level of reduction in discounts allowed	K6_% of loan finance at any given time				
L6_level of reduction in electricity costs	K4_level of discount received per given period				
L11_level of reduction in bad debts	F7: MARKET SCANNING				
L10_level of discount forgone	D2_information on performance of products in different markets				
L8_level of reduction in communication expenses	D3_market information on enterprise's customers				
L7_level of reduction in council bills	D5_market information on suppliers				
L5_level of reduction in labour cost	D4_market information on competitors				
L4_level of reduction in transport costs	B1_no. of key decisions by employees				
N1_increase in gross profit	B7_level of willingness to go an extra mile				
L3_level of reduction in inventory holding costs	F8: EMPLOYEE MOTIVATION				
L1_level of security of inventory from pilferage	B4_level of staff motivation				
F3: TRAINING AND DEVELOPMENT	B5_willingness to have unpaid overtime				
A12_amount of time devoted to training	B10_no. of training programs attended by employees				

Codes for items in rotated	factor analysis - Table 5.38
A13_amount of funds committed towards training	B3_level of performance related incentives
A11_no. of employees trained	B9_no. of training programs initiated by employees
A15_no. of employer initiated training programs	B2_level of staff morale
A14_effectiveness of training programs	A18_no. of feedback meetings arranged by employer
A16_no. of employees trained on employer's cost	B8_level of labour turnover
A17_no. of self-directed actions by employees	F9: MANAGEMENT OF REGULATORS
A7_no. of new unknown markets blessed by owner/manager	J1_no. of times enterprise is penalised by tax authorities per given period
A19_no. of key responsibilities assigned to employees by owner/manager	J2_no of times enterprise pay tax by due date per given period
A9_no. of unknown prod introduced with blessing from owner/man	J6_no. of times the enterprise is penalised by a monitoring board per given period
A5_no. of business contacts by owner/manager	J3_no. of time enterprise is penalised by city authorities per given period per given period
A10_no. of courses attended by owner/manager	J4_no. of times enterprise pay licence fees by due dates per given period
A4_no. of decisions made by owner/managers	J5_no. of membership to industry associations per given period
A3_no. of meetings convened by owner/manager	F10: MANAGEMENT OF RESOURES
F4: COMPETITOR MANAGEMENT	F4_level of working capital
G5_extent of taking advantages of competitors' weaknesses	C5_amount of resources required in future

Codes for items in rotated factor analysis - Table 5.38					
G3_no. of competitor exits per given period	F1_level of intangible assets				
G4_competitor product range per given period	C1_no. of market planning meetings				
G2_no. of new entrants per given period	F11: EMPLOYEE COMMITMENT				
G6_no. of exercises to compare the enterprise's activities with those of best performing competitor enterprises	N2_increase in net profit				
G1_no. of competitors per given period	B6_level of work attendance				
G8_competitors' market share per given period	F3_no. of key employees				
G7_no. of changes effected as a result of the enterprise's benchmarking activities at any given period	F12: MEASURE OF RETURN				
i2_average time of delivery by supplier	N7_Return on capital employed				
	N6_Return on investment				
	i3_level of discount received				

5.2.3.2 Outline of the factors

Factor 1: Innovation

Eighteen items loaded onto Factor 1 and the factor loading for most of the items ranges between .500 and .764 implying that they measure factor 1 dimension. It is clear from Table 5.38 and Table 5.39 that these 18 items all relate to innovation as they focus on development of new processes and products. The factor explains about 7.9% of the variance. Most of the items on innovation in the original questionnaire loaded under this factor. The items in the original questionnaire which were excluded in this factor because of having factor loadings below .40 were number of new products in the market and the percentage of new product turnover. Thus, the factor innovation emerged as one of the performance measurement factors.

Factor 2: Management of costs

Ten items loaded onto the second factor and the factor loadings ranges from .403 to .613. This factor relates to management of costs. All the questions on cost management in the questionnaire loaded on this factor. This confirms that these questionnaire items indeed measure costs. However, item N1_increase in gross profit also loaded on this factor. This item was disregarded in the computation of factor scores because it is illogical for it to belong to the factor as it is not related to costs. The factor explains 5.3% of the variance.

Factor 3: Training and development

Thirteen items loaded on the third factor and the items relate to training and development of both employees and owner/managers. The factor loading for the items in the factor ranges from .680 to .403. The questionnaire administered to the owner/managers did not have a factor on training and development and the factor emerged from the exploratory factor analysis. Three items which loaded on this factor were excluded in the computation of the factor score as they do not relate to the factor. The three items are A5_no. of business contacts by owner/manager, A4_no. of decisions made by owner/managers and A3_no. of meetings convened by owner/manager. The factor explains 5.1% of the variance.

Factor 4: Management of competitors

Nine items loaded onto Factor four and relate to management of competitors. The factor loadings for the items in the factor range from .416 to .688 implying that the items are fairly related to the factor. One item, i2_average time of delivery by supplier, was not included in the computation of factor scores for management of competitors as it is clear that it does not relate to that factor. The factor explains about 5.1% of the variance. Competitor management was one of the critical success factors included in the questionnaire and the exploratory factor analysis resulted in the loss of two items, namely: competitors' fast moving goods and competitors' slow moving goods.

Factor 5: Management of customers

Eleven items were loaded on factor five with factor loadings ranging from .694 to .444. All the items in factor 6 relates to management of customers. This factor explains 4.8% of the variance. The item of customer management in the questionnaire lost during the exploratory analysis was number of customer repeat purchases.

Factor 6: Management of sources of finance

The factor loading for the nine items ranged from .455 to .672. The factor explains 4.8% of the variance. The naming of the sixth factor is problematic because it has six items which relates to management of sources of finance and three factors which are irrelevant to management of sources of finance. The three factors are D8_level of ICT integration per given period, G9_competitors' fast moving goods per given period and G10_competitors' slow moving goods per given period. The three factors are not included in the computation of factor scores for this factor as they do not relate to the factor.

Factor 7: Market scanning

Five of the six items that load onto Factor 7 relates to gathering of market information on the enterprise's customers, suppliers, competitors, performance of products in different markets, and the number of key decisions made by employees. These items collectively relate to market scanning, hence the factor is identified as market scanning. The factor loading for items making up the factor range from .446 to .668 imply a fairly positive relationship with the factor. The factor B7_level of willingness to go an extra mile, was not included in the computation of the factor scores for market scanning as it did not relate to the factor. The factor explains 3.9% of the variance.

Factor 8: Employee motivation

Eight items loaded on factor 8 with factor loading for the items ranging from .581 to .415 implying that all the items relate to the factor. The factor accounts for 3.8% of the variance. One of the factors, A18_no. of feedback meetings arranged by employer, was not included in the computation of factor scores as it is not related to the employee motivation factor.

Factor 9: Management of regulators

All the six items in factor 9 focus on management of regulators. The factor loadings for the items range from .740 to .487 implying a relatively high correlation with the factor. The factor explains about 3.3% of the variance.

Factor 10: Management of resources

Three of the four items which loaded on this factor relates to management of resources and explains 2.7% of the variance. The other item, C1_no. of market planning meetings is not related to the factor. The factor loadings range from .417 to .483 indicating that the factor loadings are relatively low implying that the items do not relate much to the factor.

Factor 11: Employee commitment

Three items loaded on this factor and the factor loadings range from .413 to .705 and the percentage of variance explained by this factor is 2.4%. One of the items, N2_increase in net profit is not related to the employee commitment factor and this leaves the factor with only two items. However, the minimum number of items in a factor is three implying that the employee commitment factor ceases to be considered as a factor.

Factor 12: Measure of return

The factor consists of three items, two focusing on utilisation of capital and the other focusing on income from suppliers. The factor loadings for the items range from .440 to .638 implying a moderate relationship between the items and the factor. The factor explains about 2.3% of the variance. It is surprising that this factor does not have measurement for gross profit or net profit as could be expected. The descriptive statistics performed in section 5.2.4 indicated that the extent of measurement of gross profit and net profit were relatively high.

Factor 13

Factor 13 has only one item and, therefore, does not qualify to be regarded as a factor. It is, therefore, excluded from further analysis.

It can be seen from Table 5.39 that when the number of factors to be extracted was fixed at 13, the exploratory factor analysis produced 11 valid factors. The 11 factors were subjected to Cronbach alpha reliability tests, to check internal consistency.

Testing the reliability of the constructs (factors)

The items in each factor were subjected to a reliability test to check for internal consistency and to establish if the factors emerging from the exploratory factor analysis can be used in further analysis. Table 5.40 shows the Cronbach alpha for each of the ten factors. The detailed outcome of the reliability test for each factor is shown in Appendix D.

Table 5.40: Cronbach alpha for each factor

No	Factor	Cronbach alpha
F1	Innovation	.923
F2	Cost management	.862
F3	Training and development	.867
F4	Competitor management	.875
F5	Customer management	.884
F6	Management of sources of finance	.800
F7	Market scanning	.786
F8	Employee motivation	.786
F9	Management of resources	.539
F10	Management of regulators	.827
F11	Measure of return	.738

The Cronbach alpha coefficients presented in Table 5.40 indicate that the internal consistency for each factor is high implying high reliability for the factors and, therefore, further analysis like computation of composite factor scores could be conducted.

5.2.3.3 Performance measurement factors selected based on reliability test

The 123 performance measurement items in the questionnaire were reduced to 10 factors. Initially there were 11 factors which emerged from the exploratory factor analysis but one of the factors, management of resources, failed the reliability test and was, therefore, disregarded as a performance measurement factor resulting in a provisional performance measurement framework with 10 factors. The provisional performance measurement framework is presented in Table 5.41.

Table 5.41: Provisional performance measurement framework

FACTOR	MEASURE
	Amount of time devoted to developing new ideas
	Level of research and development activities per given period
	Number of new services/processes from Research & Development
	Number of new ideas generated per given period
	Number of innovation meetings held per given period
	Number of new ideas tested in market per given period
<u>N</u>	Number of new markets developed from Research & Development
F1: INNOVATION	Number of new skills developed per given period
N N	Number of new ways of operating per given period
<u></u>	Amount of resources committed to developing new brands per given period
	Number of products with new company packaging per given period
	Number of new managerial systems per given period
	Number of new services introduced per given period
	Number of existing services modified per given period
	Amount of resources committed to innovation per given period
	Number of new technologies used per given period

FACTOR	MEASURE
	Number new markets for existing products
	Number of new promotional campaigns
	Level of reduction in discounts allowed
	Level of reduction in electricity costs
Ę	Level of reduction in bad debts
F2: COST MANAGEMENT	Level of discount forgone from suppliers
NAG	Level of reduction in communication expenses
ΨW	Level of reduction in council bills
SOS	Level of reduction in labour cost
F2: (Level of reduction in transport costs
	Level of reduction in inventory holding costs
	Level of security of inventory from pilferage
	Amount of time devoted to training per given period
Ę	Amount of funds committed towards training per given period
OPMENT	Number of employees trained per given period
	Number of employer initiated training programs per given period
ID DE	Effectiveness of training programs
A A	Number of employees trained on employer's cost per given period
F3: TRAINING AND DEVEL	Number of self-directed actions by employees per given period
: TRA	Number of new unknown markets blessed by owner/manager
E	Number of key responsibilities assigned to employees by owner/manager
	Number of unknown products introduced with blessing from owner/manager

FACTOR	MEASURE
	Number of courses attended by owner/manager
	Extent of taking advantages of competitors' weaknesses
ENT	Number of competitor exits per given period
\GEN	Competitor product range per given period
AAN	Number of new entrants per given period
F4: COMPETITOR MANAGEMENT	Number of exercises to compare the enterprise's activities with those of best performing competitor enterprises
APET	Number of competitors per given period
CO	Competitors' market share per given period
F4:	Number of changes effected as a result of the enterprise's benchmarking activities at any given period
	Number of after sale support services per customer per given period
	Number of changes in response to market changes
Ę	Number of customers per full time employee per given period
AGEMENT	Number of customer complains per given period
	Number change in sales volume of each product per given period
M M	Number of customer referred by other customers per given period
MER	Number of suggestions from customers per given period
JSTO	Number of years a customer purchased from enterprise
F5: CUSTOMER MAN	Number of customers per given period
L	Number of regular customers lost per given period
	Number of surveys to get customer feedback per given period

FACTOR	MEASURE
ĽШ	Number of times the enterprise is penalised for late payment of credit
NT O ANC	Percentage of finance from retained earnings per given period
EME:	Percentage of finance contributed by owners per given period
NAG E OF	Number of times enterprise fail to pay interest on time per given period
F6: MANAGEMENT OF SOURCE OF FINANCE	Percentage of loan finance at any given time
F6 SC	Level of discount received per given period
	Information on performance of products in different markets
ET S	Market information on enterprise's customers
F7: MARKET SCANNING	Market information on suppliers
F7: IV	Market information on competitors
_	Number of key decisions by employees
NO	Level of staff motivation
YEE MOTIVATION	Willingness to have unpaid overtime
MOTI	Number of training programs attended by employees
ĒΕΝ	Level of performance related incentives
	Number of training programs initiated by employees
F8: EMPLO	Level of staff morale
.83 :83	Level of labour turnover
L S	Number of times enterprise is penalised by tax authorities per given period
EMEI	Number of times enterprise pay tax by due date per given period
MANAGEMENT REGULATORS	Number of times the enterprise is penalised by a monitoring board per given period
F9: N	Number of time enterprise is penalised by city authorities per given period per given period

FACTOR	MEASURE
	Number of times enterprise pay licence fees by due dates per given period
	Number of membership to industry associations per given period
R R	Return on capital employed
F10: ASUI OF ETUR	Return on investment
ME, T	Level of discount received

5.2.3.4 Computation of factor scores

This involved determining a single score for each construct by calculating the average score for the individual items/statements. Thus, factor or construct scores were calculated by taking the average of the items that loaded onto that factor for each participant. SPSS version 20 was used to compute the factor scores following the command:

Table 5.42 presents the descriptive statistics for the factors. Generally most MSMEs do not measure the critical success factors proposed in this study. The average extent of measurement of the critical success factors is very low ranging from 1.6 to 2.5.

Table 5.42: Descriptive statistics for extent of measurement of the factors

FACTOR	Min	Max	Mean	S D
Market Scanning	1.00	4.50	2.4815	.64695
Training and development	1.00	4.17	2.3426	.61330
Management of costs	1.00	5.00	2.2307	.62740
Management of source of finance	1.00	4.50	2.1596	.62735
Innovation	1.00	3.94	2.0541	.64893
Employee motivation	1.00	4.50	1.9744	.62106
Management of regulators	1.00	3.67	1.9621	.69288

FACTOR	Min	Max	Mean	S D
Management of customers	1.00	3.40	1.9392	.61786
Management of competitors	1.00	4.00	1.9180	.63911
Management of income	1.00	4.00	1.5873	.59959

Although most MSMEs rarely measure the CSFs which emerged from the exploratory factor analysis, the results indicate that the extent of measurement of market scanning, training and development, management of cost, management of sources of finance and innovation were relatively higher than other factors.

5.2.3.5 Testing variables for normality

The tests for normality were done for each factor variable separately. This was done in order to ascertain whether the factor variables are normally distributed so that parametric statistical techniques such as Pearson regression and linear regression can be performed. Normality was ascertained using skewness and kurtosis test and visual inspection of the histogram. The skewness and kurtosis Z score measures are presented in Table 5.43.

Table 5.43: Measures of skewness and Kurtosis for the factor variables

Factor variable	Skewness	Kurtosis	Decision
ractor variable	Z-score	Z- score	Decision
Years in operation	16.4	37.0	Not normal
Average profit margin	-0.9	2.3	Normal
Innovation	2.3	-1.3	Normal
Management of costs	3.5	3.8	Not normal
Training and development	1.6	0.5	Normal
Management of competitors	5.7	1.6	Not normal
Management of customers	2.3	-2.6	Normal
Management of sources of finance	6.4	4.6	Not normal

Factor variable	Skewness	Kurtosis	Decision	
ractor variable	Z-score	Z- score	Decision	
Market Scanning	0.4	0.3	Normal	
Employee motivation	5.5	3.8	Not normal	
Management of regulators	1.3	-2.8	Normal	
Management of income	7.9	6.4	Not normal	

An inspection of the skewness and Kurtosis z- score values presented in Table 5.43 suggests that some factor variables are normally distributed while others are not. The acceptable z-score for a sample between 50 and 300 is between -3.29 and 3.29 (Kim, 2013). The histograms for the factors were also inspected visually and the decision is presented in Table 5.44. The histograms are presented in Appendix E.

Table 5.44: Outcome of visual inspection of histograms

Factor variable	Decision
Average profit margin	Normal
Number of years in operation	Not normal
Innovation	Normal
Management of costs	Normal
Training and development	Normal
Management of competitors	Not normal
Management of customers	Not normal
Management of sources of finance	Normal
Market Scanning	Normal
Employee motivation	Not normal
Management of regulators	Normal
Management of income	Not normal

The visual inspection of the histograms suggests that some variables are normally distributed while others are not. As a result, the relationship between the variables is tested using Spearman correlation, a non-parametric test. Table 5.45 presents the correlation coefficients for the correlation between the extent of measurement of the critical success factors and profit margin, number of years in operation and number of employees.

5.2.3.6 Correlation analysis

Correlation between extent of measurement of the CSFs, profit, number of years in operation and size of MSMEs

Spearman correlation analysis was conducted at 0.05 significance level, using SPSS version 20, to test if there is a positive correlation between extent of measurement of the CSFs, profit, and numbers of years the MSME has been in operation and size of a MSME. The profitability of MSMEs was represented by the MSMEs' average profit margin in the last three years and size of MSMEs was represented by number of employees. Level of profit may be used as an indicator of a MSME's success and period of operation as an indicator of the enterprise's survival.

Table 5.45: Correlation matrix between the factors

	Pro	inn	cst	trd	Cmp	cus	fin	ms	emm	reg	roc	yrs	emp
pro	-												
inn	.504**	-											
cst	.589**	.475**	-										
trd	.472**	.469**	.398**	-									
стр	.524**	.413**	.519**	.353**	-								
cus	.607**	.477**	.494**	.334**	.467**	-							
fin	.462**	.318**	.451**	.256**	.409**	.478**	-						
ms	.547**	.333**	.342**	.403**	.275**	.316**	.302**	-					
emm	.572**	.448**	.478**	.408**	.517**	.513**	.386**	.375**	-				
reg	.552**	.436**	.454**	.416**	.390**	.413**	.319**	.329**	.324**	-			
roc	.436**	.290**	.409**	.339**	.331**	.352**	.375**	.213**	.365**	.257**	-		
yrs	.096	.121	.238**	.149*	.016	.212**	.109	.112	.113	.068	.056	-	
emp	.097	.091	.055	.077	093	.098	.054	.000	.078	.192**	029	.333**	-

^{*=} p < .05; **= p < .01, ***= p < .001

Key for the variables in the correlation matrix

Key	Description	Key	Description
pro	Average profit margin	ms	Market scanning
inn	innovation	emm	Employee motivation
cst	Management of costs	reg	Management of regulators
trd	Training and development	roc	Return on capital
cmp	Management of competitors	yrs	No. of years in operation
cus	Management of customers	emp	No. of employees
fin	Management of sources of finance		

Based on the results of the study, there is generally a strong positive correlation between level of profit margin and the extent of measurement of the CSFs. The relationship is statistically significant for all the factors at the 0.05 significance level. Previous studies also claim existence of a positive relationship between measurement of an enterprise's performance and the success of the enterprise (Cocca & Alberti, 2010; Srimai et al., 2011). The correlation between average profit margin and the extent of measurement of most CSFs is above 0.50 implying a strong correlation. The only exceptions are for training and development, management of sources of finance and return on capital, which have correlations between 0.40 and 0.50 implying moderate correlation. The strength of the correlation was interpreted based on the rule of thumb guideline by Cohen (1988) who indicated that a correlation coefficient of 0.10 represents a weak or small association, 0.30 a moderate correlation and 0.50 and above a strong or larger correlation. Generally correlation coefficients in social science studies are very low. Therefore, the results confirm existence of a positive relationship between level of profit margin and extent of measurement of all the critical success factors considered in this study.

The CSFs whose extent of measurement exhibited the strongest positive correlation with level of profit were management of customers and management of costs. Management of customers is important in retail business and, therefore, MSMEs which monitor their management of customers are likely to be more profitable as suggested by the high positive correlation between the extent of measurement of

customer management and profit margin. Previous studies suggest existence of a positive correlation between extent of measurement of customer management and firm performance (Azmat & Samaratunge, 2013; Blackburn *et al.*, 2013; Taipale-Erävala *et al.*, 2014; Gerba & Viswanadham, 2016; Wach *et al.*, 2016). Management of costs is also regarded as one of the factors which have an influence on the profitability of a company (Drury, 2004; Neely, 2007; Otley, 2007; Laitinen, 2011; Ng *et al.*, 2013; Williams & O'Donovan, 2015). Therefore, the positive correlation between extent of measurement of the MSMEs' management of costs and the level of profit suggests that a MSME's level of profit is related to its measurement and monitoring of costs.

The correlation coefficients for extent of measurement of employee motivation, management of regulators, market scanning and management of competitors were also fairly high, all being above 0.50. Previous studies have found a relationship between the monitoring of employee motivation and enterprise performance (Bartunek & Spreitzer, 2006; Humborstad & Perry, 2011; Suriyankietkaew & Avery, 2014). This study has found a positive correlation between extent of measurement of variables that define employee motivation and the MSMEs' level of profit. The positive correlation between extent of measurement of the MSMEs' management of regulators and level of profit reaffirms previous studies which highlighted existence of positive relationship between level of tax compliance among MSMEs and profitability (Utaumire et al., 2013; Nyamwanza et al., 2014). Tax compliance is regarded as one of the aspects of regulation in this study. Market scanning is also very important for any business and those MSMEs who monitor the extent of market planning are likely to report higher profit (Jayawarna et al., 2007; Talib et al., 2014). Hence the relatively higher correlation between extent of measurement of market scanning and level of profit witnessed in this study.

Previous studies suggest existence of a positive relationship between management of competitors through benchmarking and the enterprise's profitability (Amir, 2011; Laukkanen *et al.*, 2013; Afonso & Cabrita, 2015; Taschner, 2016). Although the positive correlation witnessed in this study was between extent of measurement of competitor management and profitability and not level of competitor management and profitability, it may be argued that those MSMEs which monitor the level of

management of competitors are likely to have higher level of competitor management.

Extent of measurement of innovation was moderately positively correlated to extent of measurement of other CSFs, with the Spearman correlation ranging between 0.477 and 0.290. The positive correlation was more pronounced between innovation and the CSFs customer management, cost management and training and development. This implies that those MSMEs which monitor their level of innovation are also likely to monitor their level of customer management, cost management and training and development. Generally each of the CSF considered for this study had positive correlation with other CSFs. However, the Spearman correlation coefficient between extent of measurement of return on capital and extent of measurement of other CSFs was low suggesting that monitoring of return on capital is not related to monitoring of other CSFs. Probably most MSMEs monitor financial performance more than non-financial performance as has been found in previous studies (Blackburn et al., 2013; Gerba & Viswanadham, 2016).

In terms of the correlation between the number of years the MSME has been in operation and the extent of measurement of the CSFs, only extent of measurement of cost management, customer management, and training and development had a positive correlation with number of years the MSME had been in operation. However, the correlation is not very strong in all the three cases. The size of the MSME as measured by number of employees, had no correlation with the extent of measurement of all the CSFs except for the extent of measurement of management of regulators. The positive correlation between the extent of measurement of management of regulators and the size of the MSME, though not very strong, suggests that the bigger the MSME the higher the extent of measurement of its management of regulators. This may be in line with some studies which indicates that small enterprises often find it difficult to manage their relationship with regulatory authorises, particularly tax authorities (Utaumire *et al.*, 2013).

The strength of the correlation was interpreted based on the rule of thumb guideline by Cohen (1988) who indicated that a correlation coefficient of 0.10 represents a weak or small association, 0.30 a moderate correlation and 0.50 and above a strong or larger correlation. Generally correlation coefficients in social science studies are very low. Therefore, the results confirm existence of a positive relationship between

level of profit margin and extent of measurement of all the critical success factors considered in this study.

Correlation between the extent of measurement of the CSF and intensity (amount) of the CSF

Spearman correlation test was conducted to establish if the extent of measurement of a CSF is related to its intensity. Table 5.46 presents the results of the correlation test.

Table 5.46: Correlation between extent of measurement and intensity of each CSF

No	Critical Success Factor	Spearman rho
F1	Innovation	.835**
F2	Cost management	.661**
F3	Training and development	.693**
F4	Competitor management	.552**
F5	Customer management	.808**
F6	Availability of finance	.653**
F7	Market scanning	.630**
F8	Employee motivation	.737**
F9	Management of regulators	.794**
F10	Return on capital	.903**

^{*=} p < .05; **= p < .01, ***= p < .001

The results in Table 5.46 indicate a very strong positive correlation between the extent of measurement of a CSF and its intensity as perceived by the owner/managers. The results of all the CSFs are statistically significant at 0.001 level of significance. Therefore, the higher the extent of measurement of a CSF, the higher the perceived level of the CSF. For example, the higher the extent of measurement of innovation the higher the level of innovation in a MSME. That is, those MSMEs which indicated that their extent of measurement of innovation was high, also perceived the level of innovation in their MSMEs to be high. It is

encouraging to note that those MSMEs which reported a higher extent of measurement of return on capital also perceived their return on capital to be high. The strong relationship between the extent of measurement of a CSF and its intensity suggest that those MSMEs which measure and monitor the extent of measurement of the CSFs have higher levels of the CSFs. This important finding confirms the importance of performance measurement in MSMEs and re-affirms assertion by some researchers that you can only improve what you can measure and monitor (Salaheldin, 2009; Van Looy & Shafagatova, 2016). Thus, it is plausible that measuring the level of a CSF will likely result in the management and improvement of the CSF.

5.2.3.7 Relationship between profit and extent of measurement of CSFs

Full regression (enter method) and stepwise regression analyses were conducted to identify those CSFs whose extent of measurement have statistically significant relationship with level of profit. The ten CSFs considered for the study were innovation, management of costs, training and development, management of competitors, management of customers, management of sources of finance, market scanning, employee motivation, management of regulators and return on capital

The full multiple regression analysis results (enter method)

The full regression analysis was conducted in order to identify those CSFs whose extent of measurement has a direct impact on profitability. The correlation coefficients of the variables in the analysis are shown in Appendix F. The correlation coefficients are rounded off to two decimal places. All the predictor variables have significant correlations with the dependent variable, profit margin, and their intercorrelations are all well below 0.60 and, therefore, multicollinearity may not be a significant problem. As long as correlation coefficients among independent variables are less than 0.90 the assumption of not having high inter-correlations (multicollinearity) is met (Baguley, 2012).

Four CSFs out of ten CSFs had a statistically significant relationship with profit margin. These four CSFs whose extent of measurement had statistically significant relationship with profit are cost management, customer management, market scanning and management of regulators. The CSFs whose extent of measurement did not produce a statistically significant relationship with profit margin are

innovation, training and development, management of competitors, management of sources of finance and return on capital.

The four CSFs included in the regression model are shown in Table 5.47. The regression model was statistically significant, F(10,178) = 25.394, p<.001, and accounted for approximately 57% of the variance of level of profit (R^2 =.588, Adjusted R² = .565). Generally, the r² values for social or behavioural science researches are very low because the models are not expected to include all the relevant predictors to explain an outcome variable (Neter, Kutner, Nachtsheim & Wasserman, 1996). There is an argument that if the basic objective of a linear regression analysis is to examine the effect of one or two variables on another variable, the focus should be on the sign and statistical significance of the explanatory variables and a low R square may not matter much (Sen & Srivastava, 2012). Therefore, if the r² value is low but there are statistically significant predictors, important conclusions can still be drawn about how changes in the independent variables are associated with changes in the dependent variable (Bedeian & Mossholder, 1994). This means that regardless of the value of r², the significant coefficients still represent the mean change in the response for one unit of change in the predictor while holding other predictors in the model constant.

Table 5.47 presents the raw and standardized regression coefficients of the predictor variables. Tests to see if the data met the assumption of collinearity indicated that multicollinearity is not a concern as the Variance Inflation Factor (VIF) values for all predictor values in the model are less than 10, and Tolerance levels are greater than 0.1. If tolerance is less than 0.10 and VIF is above 10 then there is a multicollinearity problem (O'Brien, 2007).

Table 5.47: Results of stepwise regression analysis involving profit and extent of measurement of CSFs

Coefficients of CSFs (N = 189)									
Extent of measurement		C	Collinearity	Collinearity Statistics					
	В	SE	β	Т	P	Tolerance	VIF		
(Constant)	-33.895	2.561		-13.236	.000				
Innovation	.837	.972	.055	.861	.390	.569	1.756		
Cost management	2.246	1.066	.142	2.106	.037	.506	1.976		
Training and development	1.033	.967	.064	1.069	.287	.648	1.544		
Competitor management	1.262	1.033	.082	1.222	.223	.519	1.926		
Customer management	2.568	1.108	.160	2.317	.022	.483	2.071		
Management of sources of finance	.062	.935	.004	.066	.947	.658	1.519		
Market scanning	3.746	.910	.232	4.115	.000	.728	1.373		
Employee motivation	1.596	1.072	.102	1.488	.139	.489	2.045		
Management of regulators	2.614	.828	.183	3.157	.002	.688	1.453		
Return on capital	1.380	.941	.084	1.467	.144	.711	1.406		
Dependent variable: net profit margin									

It can be seen from Table 5.47 that the extent of measurement of market scanning, management of regulators, customer management and cost management CSFs have relatively higher impact on the profitability of MSMEs. Previous studies indicate existence of a relationship between management of regulators such tax authority and MSMEs' business success (Utaumire *et al.*, 2013; Nyamwanza *et al.*, 2014) and customer management and level of profit (Azmat & Samaratunge, 2013).

Although the objective of this study is not to come up with a predictive model, a model of the regression analysis is presented in all the cases where applicable so as to give an overview of the impact of the independent variables on the dependent variable. Therefore, the following regression equation can be constructed from the regression coefficients in Table 5.47.

$$Y = -33.895 + 2.246X_1 + 2.568X_2 + 3.746X_3 + 2.614X_4$$

Where Y = Average profit margin;

 X_1 = Extent of measurement of cost management CSF

 X_2 = Extent of measurement of customer management CSF

 X_3 = Extent of measurement of level of market scanning CSF

X₄ = Extent of measurement of management of regulators CSF

The above regression model shows that the monitoring of the level of market scanning has the highest impact on the profitability of MSMEs.

Stepwise regression analysis

The full multiple regression analysis (using enter method) conducted above was repeated using the stepwise method. The correlations of the variables in the analysis are shown in Appendix F and are the same as for the previous regression analysis (enter method). Five CSFs out of ten CSFs had a statistically significant relationship with profit margin. These five CSFs whose extent of measurement had statistically significant relationship with profit are cost management, customer management, market scanning, management of regulators and employee motivation. Thus, stepwise regression introduced employee motivation as an additional factor. The

other four factors selected in the full model (enter method) were also selected in the stepwise regression.

The five CSFs included in the model are shown in Table 5.48. The model was statistically significant, F(5,183) = 48.575, p<.001, and accounted for approximately 56% of the variance of level of profit ($R^2 = .570$, Adjusted $R^2 = .559$). Table 5.48 presents the raw and standardized regression coefficients of the predictor variables. Tests to see if the data met the assumption of collinearity indicated that multicollinearity is not a concern as the VIFs values for all predictor values in the model are less than 10, and Tolerance levels are greater than 0.1.

Table 5.48: Results of stepwise regression analysis involving profit and extent of measurement of CSFs

Coefficients of CSFs (N = 189)										
Extent of		Coe	Collinearity Statistics							
measurement	В	SE	β	Т	P	Tolerance	VIF			
(Constant)	-31.938	2.341		-13.641	.000					
Customer management	3.240	1.017	.202	3.185	.002	.581	1.720			
Market scanning	4.001	.899	.248	4.450	.000	.758	1.320			
Cost management	3.355	.981	.213	3.419	.001	.606	1.651			
Management of regulators	2.962	.801	.208	3.697	.000	.745	1.342			
Employee motivation	2.509	1.023	.161	2.453	.015	.545	1.834			
Dependent variable: net profit margin										

It can be seen from Table 5.48 that the impact of extent of measurement of market scanning, management of regulators, customer management and cost management is now more pronounced in the stepwise regression as the unstandardized coefficients are much higher than in the full model (enter method). Therefore, the

following regression model can be constructed from the regression coefficients in Table 5.48.

$$Y = -31.938 + 3.240X_1 + 4.001X_2 + 3.355X_3 + 2.962X_4 + 2.509X_5$$

Where Y = Average profit margin;

 X_1 = Extent of measurement of customer management CSF

 X_2 = Extent of measurement of market scanning CSF

 X_3 = Extent of measurement of cost management CSF

 X_4 = Extent of measurement of management of regulators CSF

 X_5 = Extent of measurement of employee motivation CSF

The above regression model is different from the previous model in that it has extent of measurement of employee motivation as another factor which has an impact on profit. An enterprise which monitors the level of motivation of its employees is likely to pay attention to the needs of its employees. A number of studies highlight that level of staff motivation has an impact on an enterprise's profitability (McKenna, 2005; Krüger & Rootmn, 2010; Ntalianis *et al.*, 2015).

5.2.3.8 Relationship between extent of measurement of CSFs and number of years the MSMEs have been operation

Multiple linear regression (enter method) and stepwise linear regression were both conducted to investigate the relationship between the number of years a MSME has been in operation and its extent of measurement of the CSFs. The analyses were conducted in order to identify those CSFs whose extent of measurement have a direct impact on the number of years the MSMEs have been in operation. Appendix G shows the correlations of the variables. The inter correlations between the independent variables are all well below 0.60 and, therefore, multicollinearity may not be a significant problem.

The two analyses resulted in only extent of measurement of cost management being included in the model. The model was statistically significant, F(1, 187) = 16.203, p<.001, and extent of measurement of cost management CSF accounted for approximately 8% of the variance of number of years the MSME has been in operation ($R^2 = .080$, Adjusted $R^2 = .075$). Therefore, the period of operation was

predicted by extent of measurement of cost management CSF. The raw and standardised regression coefficients of the predictor are shown in Table 5.49. The tests to see if the data met the assumption of collinearity indicated that multicollinearity was not a concern because VIF was less than 10 and Tolerance greater than 0.1 for the CSF included in the model.

Table 5.49: Results of stepwise regression analysis involving profit and extent of measurement of CSFs

Coefficients of CSFs (N = 189)										
Extent of		С	Collinearity Statistics							
measurement	В	SE	β	Т	P	Tolerance	VIF			
(Constant)	1.871	.985		1.900	.059					
Cost management	1.711	.425	.282	4.025	.000	1.000	1.000			
Dependent variable: years in operation										

It can be seen from Table 5.49 that a unit change in the extent of measurement of cost management CSF has an impact on the number of years a MSME has been operating. The following regression equation can be constructed from the cost management regression coefficient presented in Table 5.49.

$$Y = 1.871 + 1.711X$$

Where **Y** = Number of years a MSME has been in operation

X = Extent of measurement of cost management CSF.

Out of the ten CSFs under study, only extent of measurement of cost management was found to have an impact on the number of years the MSMEs would be in operation. That is, those MSMEs whose extent of measurement of cost management CSF is high, are more likely to operate longer. A number of previous studies indicate that management of costs has an impact on the survival of MSMEs (Biggart *et al.*, 2010; Fening, 2012; Kwamega *et al.*, 2015).

5.2.3.9 Decision tree to profile profit groups

A decision tree was used to identify those CSFs whose extent of measurement have an influence on making profit or not making profit. The independent variables used in the model were extent of measurement of innovation, cost management, training and development, competitor management, customer management, sources of finance, market scanning, employee motivation, regulators management, and return on capital.

A decision tree is a widely used data mining technique. Data mining can be described as the process of collecting, searching through, and analysing large amounts of data in a database, so as to discover meaningful patterns or relationships (Song & Ying, 2015). A decision tree model allows one to develop a classification system that predict or classify future observations based on a set of decision rules. The value of the decision tree is that it accounts for the interaction between the independent variables and the complexity of building a model with a lot of independent variables. The decision trees offer a decision-making model with high level of interpretability and are a special form of a tree structure. The tree consists of nodes where a logical decision has to be made, and connecting branches that are chosen according to the result of this decision. The nodes and branches that are followed constitute a sequential path through a decision tree that reaches a final decision in the end. Each node represents an independent variable in the dataset.

The stopping rule:

The first split in the tree was market scanning.

CHAID (CHi-squared Automatic Interaction Detection)

The independent or target variable was 'profit or no profit' (no profit, profit).

The proportion of respondents that indicates 'profit' is 69.8% (blue group), while the proportion of respondents indicating 'no profit' is 30.2% for the whole population.

Measures of fit:

Risk estimate and its standard error

It is a measure of the tree's predictive accuracy. The risk estimate is 15.3 % with the Resubstitution method and 16.7% with the Cross-Validation method, which seems

like a fair fit. The risk estimate ranges between 0 and 1. A Risk estimate towards 0 indicates no risk or a perfect model fit, while a risk estimate around 1 indicates certain risk or a very poor model fit.

Table 5.50: Risk estimated and standard error

Method	Estimate	Std. Error
Resubstitution	.153	.026
Cross-Validation	.169	.027

Growing method: CHAID

Dependent variable: profit or no profit

Classification:

Table 5.51 presents the classification rate. The correct classification rate is 84.7% which is quite good. It means that by using this tree to predict a profit or non-profit outcome could be 84.7% correct.

Table 5.51: The Classification rate

Observed	Predicted		
	No profit	Profit	Percent Correct
No profit	33	24	57.9%
Profit	5	127	96.2%
Overall Percentage	20.1%	79.9%	84.7%

Growing method: CHAID

Dependent variable: profit or no profit

The tree diagram presented in Figure 5.1 is a graphic representation of the tree model. This tree diagram shows that, using the CHAID method, extent of measurement of market scanning is the best predictor of profitability followed by extent of measurement of customer management. The percentage of respondents who had a higher extent of measurement of market scanning (higher than 2.2 on the scale) and a higher extent of measurement of customer management (higher than 1.8 on the scale) is 100% (68/68) in contrast to the overall 69.8 % (132/189) for all

profitable MSMEs. On the other hand, the percentage of respondents that indicated 'no profit' and had the lowest extent of measurement of market scanning (1.8 or lower on the scale) is 86.8 %(33/38) in contrast to the overall percentage of 30.2 % (57/189) for all loss making MSMEs.

The decision tree results indicate that 20% of MSMEs had extent of measurement of market scanning less than 1.80, twenty one percent (21%) between 1.80 and 2.20, and fifty nine (59%) above 2.20. Of those MSMEs with extent of measurement below 1.80, 87% made a loss and only 13% made profit. On the other hand, of the 111 MSMEs whose extent of measurement of market scanning was above 2.20, 94% made a profit and only 6% made a loss.

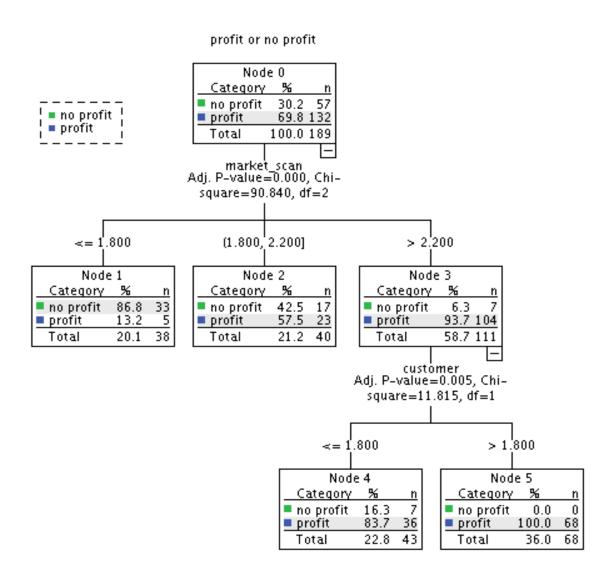


Figure 5.1: Decision tree to profile profit groups (Author's own)

The decision tree also indicates that of the 104 profitable MSMEs whose extent of measurement of market scanning is above 2.20, thirty six (36) had extent of measurement of customer management below 1.80 and sixty eight (68) above 1.80. This suggests that most of the profitable MSMEs which measure market scanning also measure customer management. Basing on these results it seems that level of profit is related to the extent of measurement of market scanning and customer management. Previous studies argue that management of customer market intelligence information makes it possible for MSMEs to explore new opportunities (Keskin, 2006; Li & Zhou, 2010; Ndubisi & Iftikhar, 2012; Guo, Zhao & Tang, 2013). Therefore, MSMEs which measure their extent of market scanning and customer management are more likely to be profitable.

5.2.3.10 The provisional performance measurement framework emerging from the quantitative study

The aim of the study was to come up with a performance measurement framework which consists of few critical success factors which MSMEs should focus on to perhaps enhance their performance. Thus, the framework should be simple and focus on few performance measures which have a bearing on business operation. The performance measurement framework emerged from an exploratory factor analysis of the performance measurement practices of retail MSMEs operating in the CBD of Harare, Zimbabwe. The exploratory factor analysis come up with ten performance measurement factors which were further reduced to five factors through stepwise multiple linear regression analysis. The five factors are, therefore, elements of the proposed performance measurement framework. The factors are:

- Customer management
- Cost management
- Market scanning
- Management of regulators
- Employee motivation

The performance measurement framework consisting of the above factors is presented in Figure 5.2. At this stage the framework is still work in progress as it does not include input from the senior officers in the accounts/finance section of the MSMEs. The framework also needs to be theoretically validated by the

owner/managers. Thus, the framework may change when the views of senior employees and selected owner/managers are captured. The framework presented here is the outcome of the quantitave study.

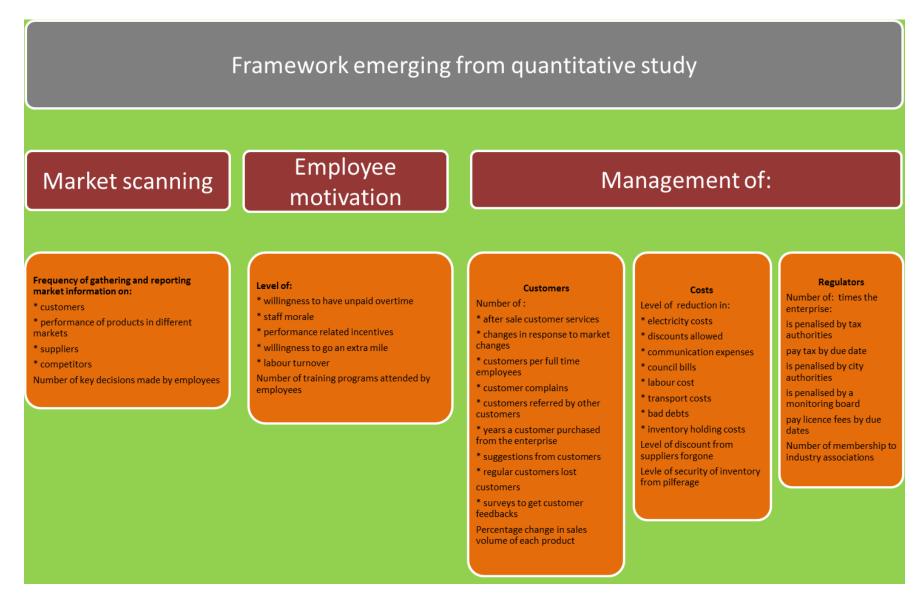


Figure 5.2: Framework emerging from the quantitative study

The performance measurement framework which emerged from the quantitative study left out a number of performance measures which the researcher assumed to be critical for the performance of MSMEs at the beginning of the study. This was however expected as the objective of the study was to reduce the number of performance measures which would eventually become elements of the proposed framework. Although a number of factors did not become part of the framework, the resulting framework is somehow balanced. The framework covers both financial and non-financial measures and also looks at a number of stakeholders.

The performance measures for cost management CSF are financial in nature and were found to have a direct impact on profitability and period of operating. Previous studies have highlighted the need to manage costs in MSME in order to enhance performance and survival (Smith & Graves, 2005; Biggart *et al.*, 2010). Although the performance measures for customer management CSF are largely non-financial in nature, it may be argued that they have a direct impact on revenue, which is a financial measure of performance.

The measures for the market scanning CSF focus mainly on gathering and managing information on customers, competitors, and suppliers. The factor looks at the frequency at which the MSME gathers relevant and probably strategic information on customers, competitors, and suppliers. The information on customers gathered in this factor is different from that gathered under customer management factor. In market scanning, the information gathered focuses on the market while information gathered under customer management factor focuses on the MSME and not the market. Studies have found that MSMEs which gather market information and uses it in decision making are more successful than those which do not (Hutchinson et al., 2015). Market scanning results in the identification of new markets and unmet needs (Bayraktar, 2015).

The regulators management CSF measures the relationship between the MSME and various regulatory authorities. Previous studies have found that tax compliance costs have a major impact on the profitability and survival of MSMEs (Utaumire *et al.*, 2013). Thus, any measures that monitor the relationship between the MSMEs and regulatory authorities are likely to enhance the success and survival of the MSMEs. The employee motivation CSF is part of the framework suggesting that motivated staff play a significant role in the profitability of a MSME. There are a number of

previous studies in support of this finding (Shepherd & Mathews, 2000; Krüger & Rootman, 2010; Suriyankietkaew & Avery, 2014).

The regression analysis could not pick up important factors like innovation; training and development; management of sources of finance; and return on capital, although these factors had been identified as measures of performance during the factor analysis stage of the data analysis. However, this may not be an indication that the factors are not important. They probably do not have a direct effect on the level of profitability. It is plausible that the factors are moderating or mediating variables on profitability. A number of studies suggest contribution of innovation (Talke et al., 2011; Al-Ansari et al., 2013; Hossain & Kauranen, 2016; Faherty & Stephens, 2016) and training and development (Meyer & Smith, 2000; Bartlett, 2001; Ling et al., 2014) to enterprise performance. Thus, since this is an exploratory study, one may not safely conclude that these factors are not elements of the performance measurement framework. There is a need for carrying out further confirmatory tests like Structural Equation Modelling (SEM) where the moderating and mediating effects of the variables may be investigated.

The proposed performance measurement framework does not have traditional measures of financial performance such as gross profit, net profit, and return on equity. The absence of these measures in the framework may not be a cause for concern because these may be regarded as output measures and are likely not to have a direct effect on performance. A framework meant to enhance the performance of MSMEs should focus on measures that are antecedents to output measures. The output depends on the process to the output (Buavaraporn & Tannock, 2013). Thus, it may be better to focus on measurement of processes that have an impact on profit rather than profit itself if the objective is to enhance the MSME's profitability. Profitability measures have also been criticised for focusing on the past and failing to predict and explain future performance (Henri, 2004; Otley, 2007; Gallani et al., 2015). They are also criticized for failing to provide practical guidance to managers on their use to enhance the performance of MSMEs (Gallani et al., 2015).

5.3 QUALITATIVE STUDY

This section looks at the perception of the most senior employees in the accounts/finance sections of MSMEs. The senior employees expressed their opinion regarding performance measurement practices in MSMEs. They also expressed their opinions on the factors critical for driving the business performance of MSMEs. The senior employees also presented their perception on the strength of the relationship between the levels of the critical success factors. In the case where the owner/manager was the one who in charge of finance/accounting functions of the MSME, the next senior person involved in the finance/accounting functions was considered for the interview. The qualitative study was in the form of semi-structured interviews and was carried out to validate the responses obtained from owner/managers of the MSMEs. Section 5.3.1 provides the profile of each case interviewed.

5.3.1 The profiles of MSMEs interviewed

Stratified random sampling was employed to select the 20 MSMEs included in the study. As a result, senior employees in the accounts/finance departments of four grocery shops, eleven clothing shops, two furniture and electrical gadgets shops, and three shops selling any combination of grocery, clothing and furniture and electrical products were interviewed. Each interview lasted for about an hour. The sample of senior employees in the accounts/finance department represented the population of MSMEs in the study by including MSMEs which deal in all types of goods. The profiles of MSMEs considered for the interviews are shown in Table 5.52.

Table 5.52: The profile of MSMEs interviewed

Code of MSME	Class of goods sold	Number of employees Category	Size of MSME	Average profit margin last 3yrs	Number of years in operation
CL1	Clothing	<10	Micro	profit	3
CL2	Clothing	10-50	Small	loss	4
CL3	Clothing	<10	micro	profit	7

Code of MSME	Class of goods sold	Number of employees Category	Size of MSME	Average profit margin last 3yrs	Number of years in operation
CL4	Clothing	10-50	small	profit	6
CL5	Clothing	<10	micro	loss	5
CL6	Clothing	>50	medium	loss	25
CL7	Clothing	10-50	small	profit	9
CL8	Clothing	10-50	small	profit	6
CL9	Clothing	<10	micro	loss	10
CL10	Clothing	10-50	small	profit	8
CL11	Clothing	<10	micro	profit	
FE1	Furniture & Electrical	<10	micro	profit	13
FE2	Furniture & Electrical	<10	micro	loss	6
GR1	Grocery	10-50	small	profit	4
GR2	Grocery	<10	micro	profit	5
GR3	Grocery	10-50	small	profit	7
GR4	Grocery	10-50	small	loss	4
CO1	Combined	<10	micro	loss	3
CO2	Combined	<10	micro	profit	11
CO3	Combined	10-50	small	loss	8

It can be seen from Table 5.52 that most of the MSMEs considered for the interviews sell clothes and are micro enterprises. This is a reflection of MSMEs operating in towns and cities around Zimbabwe. About 65% of MSMEs interviewed were established after the introduction of the multi-currency system in 2009. In 2009 Zimbabwe officially abandoned use of Zimbabwe dollar and adopted a basket of a multi-currency system which included the United States dollar, the South African rand, Botswana pula, British pound, the Chinese Yen and the Euro as official currencies. The use of multi-currency system led to economic stability.

5.3.2 Performance measurement practice of MSMEs

This section focuses on the interview responses of the senior employees in the finance/accounts section of MSMEs. The analysis is based on the quotations of respondents focusing mainly on those points emphasised on and affirmed in the interviews. The findings presented in this section cover the views of the employees with regard to the performance measurement practices of retail MSMEs. It appears most MSMEs measure performance either consciously or unconsciously. That is, they tend to measure performance in one way or the other. For example, cases CL3, CL4, CL7, CL9, CL10, GR1, GR4, CO2, and FE2 indicated that they do measure performance through evaluation of formal or informal budgets. As the senior employee from the accounts section of CL10 expressed:

"It is practically impossible for an enterprise to operate without measuring its performance. Our enterprise always sets targets and these targets should be met. Every employee strives to meet or surpass targets. Our company does not have room for lazy people. We work as a team and every employee monitors and provides moral and social support to members within the team so that the company's objectives are met."

Therefore, setting of targets is an indication that there is some form of budgeting and forward looking in MSMEs. The following revelation by an employee from case GR1 also suggests an element of performance measurement:

"The profit margins in grocery business are very low. In order for us to survive in this business we have to live within our means by religiously following our shoestring budgets. We should push sales volume in line with our sales budgets. Otherwise if we do not do that we will fail to break even. You cannot survive in this business if you do not stick to your budgets."

It also appears as if MSMEs review their performance although it may be in an *ad hoc* manner. There seem to be a system of monitoring the performance of employees and individual product lines in some MSMEs. There was frequent mention of practices such as variance analysis of sales volume and price, variance analysis of inventory costs, performance related bonus, sales commission, meeting sales targets and review meetings. Such practices were highlighted more by the retail MSMEs which deal in clothing, furniture and electrical gadgets as well as a

combination of goods. These practices were emphasised on more by the senior employees from cases CL1, CL2, CL4, CL6, CL11, GR1, CO3, and FE2. It also appears as if the practices are prevalent among those MSMEs with more than 10 employees. That is, small and medium enterprises. A senior employee from case GR1 which deal with groceries had this to say:

"Although sales volume variance was favourable in the last two years, we reported loss for the two years due to unfavourable inventory cost variances for a number of reasons. For example, in 2015 alone, we lost a significant level of perishable inventory due to frequent power outages in our area. There were also high incidents of inventory pilferage due to poor monitoring of staff on our part and failure to carry out inventory counts more frequently."

Therefore, one can deduce that some senior employees in the accounts/finance section have a perception that MSMEs measure their performance through setting and reviewing of budgets. This perception is in line with extant literature which regards budgeting as a performance measurement tool for motivating and controlling the performance of managers or divisions (Otley, 2001; Drury, 2004; Otley, 2007). Performance appraisal of each manager or division should be based on the output of the responsibility centre (Drury, 2004).

It is very likely that those MSMEs which award its employees performance related bonuses and sales commission have some mechanisms to assess the performance of employees. It was remarkable to note that some of the MSMEs had a formal system to measure the performance of employees. For example case CO3 operates a formal and well documented results based performance measurement system which was designed by a hired consultant. Most of the MSMEs which paid performance related bonus indicated that the bonus was tied to level of net profit. However, there were a few MSMEs, for example, cases CL4, CL8, and FE1 who indicated that their bonus was tied to the level of sales volume rather than level of profit. A senior manager of case CL4, which sell clothes made the following remarks:

"The competition among MSMEs which sell clothes is very high. Opening a clothing shop in Zimbabwe is very easy as barriers to entry are very low. Ever since the introduction of the multi-currency system in 2009 we have witnessed a significant increase in cheap imports from China and an influx of second hand

clothes smuggled from Mozambique. The second hand clothes are usually sold in an open market by informal traders at very low prices. Our main focus is, therefore, pushing sales volume in this highly competitive environment. Employees get incentives for surpassing set sales volume targets."

The argument by the employee of case CL4 of competition from second hand clothes smuggled into the country by informal traders may be valid in the context of Zimbabwe. A number of good second hand clothes are sold in flea markets which have sprouted throughout the country in growth points, small towns, and large cities. These informal traders can afford to sell their clothes at very low prices because their operational costs are very low. Informal traders usually do not pay any form of tax, utility bills, and rentals. Their only expenses are license fees to local authorities.

The business aspect which seems to be measured by all the MSMEs is level of profit. All the MSMEs interviewed indicated that they always assess their level of profit at least every month. However, some of the MSMEs interviewed, especially the micro enterprises indicated that they do not prepare formal financial statements but just keep records that enable them to calculate profit. The business aspect that seems never to be evaluated is innovation. The interviewed senior employees did not provide any indication that level of innovation is evaluated by the MSMEs. Failure to monitor and pay attention to level of innovation may be hindering the success and survival of most of these MSMEs. Baregheh *et al.* (2009) argued that innovation is a life blood of an enterprise's growth and survival as it is central in creating value and competitive advantage for the enterprise.

The senior employees in the accounts section of MSMEs were also asked to explain whether or not, they evaluate their relationship with external stakeholders. It emerged from the interviews that most MSMEs, especially those dealing in clothes and furniture, attempt to assess their relationship with customers and suppliers. This was emphasised more by the senior employees of cases CL3, CL4, CL5, CL10, CO1, and CO2. For example, the senior employee of case CL10 gave the following response:

"The competition in the clothing retail industry is very high. You cannot afford not to develop a good relationship with your customer. The saying that a customer is a king is more real now than before. In our company we always

measure the level of customer satisfaction and customer loyalty as we will never want to lose any of our regular customers."

A senior employee of case GR2, a grocery shop, gave a different view regarding his MSME's assessment of relationship with customers:

"In our grocery shop, it is very difficult to evaluate our relationship with customers because we do not have regular customers. Every day we seem to have new customers. Therefore, we cannot assess our effectiveness in retaining customers or evaluate the level of satisfaction of customers."

It was evident from the interviews held that most if not all MSMEs interviewed do not assess their relationship with various regulatory authorities, providers of finance and competitors. The perceptions of most senior employees in this regard were similar to those of most owner/managers.

5.3.3 Views of senior employees on the CSFs affecting performance of MSMEs

The senior employees responsible for accounting/finance functions of the MSMEs were asked to express their views on critical success factors considered as affecting the performance of MSMEs in this study. The following sections give the views of the senior employees on each critical success factor.

5.3.3.1 Owner/manager commitment CSF

Most of the senior employees interviewed indicated that the commitment of either the owner or the manager was an important factor in the success of an enterprise. It was highlighted that the commitment of the owner was particularly important when it came to provision of resources needed in running the business. The owner/managers are also important in planning how the business is run, especially the nature of products to be supplied and the market to be served. A senior employee of case CO3 gave the following remarks:

"The success and failure of MSMEs depend on the commitment of the owner/managers. I am saying this because it is the owner/manager who has to look for resources for use in the business. The resources ranges from financial, human and otherwise. There is no business which can operate efficiently without adequate resources."

However, some senior employees downplayed the importance of owner/manager commitment in the performance of a MSME. Their argument was that an enterprise trading in the right products and operating at the right place will perform very well as long as the employees of the MSME are motivated and committed to working hard for the enterprise. For example, an employee from case GR2 which deals in grocery indicated that in their business, it was the commitment of employees which was more important and not that of owner/managers. He indicated that the owners of his enterprise are not involved in the running of the business and the top manager of the MSMEs rarely spends time at the enterprise. This claim was also supported by an employee of case CO1 who had the following response:

"I have been working for this company for the last five years but I have never seen the owners of this MSMEs in this shop, even for one day. Employees are the ones who are keeping this company going. We start work at 7am and finish at 8pm and this shows high level of commitment on our part. Our MSME can continue to be profitable with or without the owner's involvement as long as employees continue exhibiting the same level of commitment as they are currently displaying."

On seeking further clarity, it appeared as if some of those who downplayed the importance of owner's commitment had a narrow conception of the owner's commitment. However, the majority of respondents were of the view that owner/manager commitment is important for the success of a MSME. This view was also held by several authors including Bassioni *et al.* (2005) who indicated that the owner/manager of the MSME is the agent of change and can influence behaviour of people who work for the enterprise.

5.3.3.2 Employee commitment CSF

All the senior employees interviewed held a unanimous view that employee commitment is a prerequisite for the success of any enterprise. Respondents from cases GR1, GR2, CO2, and CO3 indicated that committed employees are willing to work for long hours with minimum supervision. Respondents of cases CL2, CL5, CL8, and FE1 were also of the view that employees that are committed and motivated maintain good relationships with customers. The comment of a senior employee of case CL5 is worth highlighting in this study:

"Our company is driven by a few highly committed employees. No one tells anyone what to do. All the employees are committed to acquiring and retaining customers at every opportunity. There is teamwork in every aspect of what we do."

On being asked to identify the variables that define employee commitment, most senior accounts personnel mentioned factors related to remuneration, autonomous working conditions and recognition of employee efforts by the owner/managers. There was no consensus among the senior accounts personnel on the relationship between owner/manager commitment and employee commitment. That is, while a number of senior employees indicated that the commitment of employees is influenced by the level of commitment of the owner/managers, there were some senior accounts personnel who indicated that the level of commitment of employees is not affected much by the commitment of owner/managers. The matrix in Figure 5.3 summarise the perception of senior accounts personnel on the relationship between the level of owner/management commitment and the level of employee commitment in MSMEs.

er	Employee commitment		
nag	Strong relationship	Moderate relationship	
r/mai mitr	CL1, CL2, CL4, CL7, CL10, CL6, FE1, FE2.	CL3, CR1, CO2, CO3, GR2.	
wner/ comm	Not sure	No relationship	
δ°	GR3, GR4.	CL5, CL8, CO1.	

Figure 5.3: Strength of relationship of Owner/manager - Employee commitment Matrix

It can be seen from Figure 5.3 that the majority of cases interviewed indicated that there is a moderate to high relationship between owner/manager commitment and employee commitment. Previous studies have also highlighted existence of a positive relationship between owner/manager commitment and employee commitment (Macleod 1999; Carneiro, 2008; Krüger & Rootman, 2010). The senior accounts personnel of cases CO3 and CL9 could neither confirm nor deny existence of a relationship between owner/manager commitment and employee commitment. Those with the view that there is no relationship between owner/manager commitment and employee commitment are not supported by any previous studies.

5.3.3.3 Business planning

The senior employees were asked if the MSMEs had business plans in place. Although most of the senior employees indicated that the MSMEs did not have a business plan, their responses suggested existence of an informal business planning process. This state of affairs is also expressed by Garengo *et al.*, (2005) who indicated that MSMEs have a reactive approach characterised by poor strategic planning and an informal process of making decisions as well as short-term orientation.

The senior employees from cases CL1, CL3, CL4, GR2, and FE2 also suggested that owner/managers have plans on how the business is run but their plans are not written anywhere. The owner/managers of these MSMEs do not document their plans. A small number of the senior employees had a different view on business planning practice by MSMEs. They indicated that a formal planning process is irrelevant in the context of MSMEs operating in the retail sector in Zimbabwe. According to a senior employee of case CO1, business planning is a waste of time. The following are her sentiments on business planning:

"Planning is a waste of time. The environment we are operating in is highly volatile. There are frequent changes which take place in the market making long term planning impossible. We just respond to what others are doing."

The contribution of business planning to performance of MSMEs was also questioned by Bridge *et al.* (1998). However, it may be concluded that there is informal and undocumented business planning in MSMEs. This is evident from the responses given by most employees. Although the officers claimed absence of planning, their responses suggested otherwise.

The senior employees were also asked on their perception regarding existence of a relationship between the level of business planning and owner/manager commitment as well as employee commitment. The matrix presented in Figure 5.4 indicates the views of the senior employees of each case.

	Owner/manager commitment			
	Strong relationship	Moderate relationship		
50	CL1, CL2, CL4, CL10, CL6, GR3, CL8, CO1, CO2, CO3.	CL3, GR2.		
Planning	Not sure	No relationship		
3usiness Plar	GR1, GR4, FE1, FE2.	CL2, CL5, CL7, CO2.		
	Employee Commitment			
usii	Strong relationship	Moderate relationship		
ш	CL1, CL3, GR4.	CL2, CL4, CL10, CL6.		
	Not sure	No relationship		
	GR1, FE1, FE2.	CL2, CL5, CL7, CO2, GR3, CL8, CO1, CO2, CO3.		

Figure 5.4: Strength of relationship between business planning and owner/manager - employee commitment Matrix

Most senior employees interviewed were of the opinion that there is a strong relationship between business planning and owner/manager commitment. This is in line with the findings of Mumford *et al.* (2002). Most argued that the owner/manager is the one who sets the tone and direction for the company. The senior employee of GR3 had this comment:

"Our company is where it is because of the vision of our owner/manager. We are not very much involved in deciding the company's programmes. The owner who is also the managing director decides our daily programme."

The views of most senior employees presented in Figure 5.3 suggest that there is no relationship between business planning and the commitment of employees. It appears that most of these MSMEs do not involve employees in setting business plans and, therefore, decision-making. This confirms assertions by McKenna (2005) that in most MSMEs, owner/managers make decisions with no or minimum participation of employees.

5.3.3.4 Management of information

The senior employees were asked if management of information is critical for the performance of MSMEs. Most employees indicated that management of information in their MSMEs is limited to record keeping of financial transactions. None of the respondents mentioned that their MSMEs gather and report information on customers, suppliers, and competitors as suggested by some owner/managers during the questionnaire survey stage of the study. Therefore, most employees did not regard management of information as a success factor in the performance of their MSMEs. This is also supported by the response of most MSMEs regarding the strength of the relationship between business planning and management of information. The matrix in Figure 5.4 reveals the perception of the senior employees regarding the strength of the relationship between business planning and information management in their MSMEs. It appears from Figure 5.5 that most senior employees regard the relationship between business planning and information management as low. Failure to gather and use information on the enterprise's stakeholders in the planning process is likely to have a negative impact on the MSMEs' performance. Previous studies indicated that use of information on the MSMEs in business planning has a positive impact on the enterprise's performance and hence survival (Georgellis et al., 2000; Koudal & Coleman, 2005; Keskin, 2006; Ndubisi & Iftikhar, 2012; Guo et al., 2013).

ng	Information management		
Planning	Strong relationship	Moderate relationship	
	CL10, FE1, CL7, GR2.	CL3, GR1.	
ines	Not sure	No relationship	
Business	GR3, CO2, CO3.	CL5, CL8, CO1, CL1, CL2, CL4, CL9, CL6, FE2, GR4, CO4.	

Figure 5.5: Strength of relationship of Business planning - Information management matrix

It appears senior employees from profitable MSMEs perceived the relationship between business planning and information management to be high while most of the MSMEs which reported losses regarded the relationship between business planning and information management as low. A senior employee of case CL5,

which indicated that there is no relationship between business planning and information management had this comment:

"Our manager does not use much of the available information on the company in his planning. He does not have the information. It is us, the employees who have the information on customers and competitors activities because we are on the ground where activities take place. As long as he does not involve us in his planning and decision-making, he will never have enough information on what is happening in the market."

Previous studies argue that business planning is influenced by availability of information (Georgellis *et al.*, 2000).

5.3.3.5 Innovation

Responses of the majority of the senior employees suggested that there is a lot of innovation among MSMEs. Although most of the interviewed MSMEs did not mention the word innovation in their responses, one could deduce existence of innovation in the explanations which were given. For example senior employees of cases CL3, CL4, CL10, FE1, GR3, and CO3 indicated that they always find new ways of doing business in order to survive competition. A senior employee of case CL9 which specialise in children clothing had this response:

"You cannot survive in the clothing industry if you do the same things over and over again. We always find new ways of appealing to our customers. For example this year we created a playing ground in our shops for kids and equipped it with a variety of toys and games. This well-resourced in-store playing centre is accessible to children free of charge. We hope this will make our shop attractive to kids who would in turn persuade their parents to purchase from the shop."

The above response is one indication that some of the MSMEs are innovative. The senior employees were asked if there is any relationship between innovation and management of external stakeholders such as competitors, suppliers, regulators, providers of finance and customers. None of the senior employees suggested existence of a relationship between innovation and the enterprises' external stakeholders. This is contrary to findings of a number of studies which indicated existence of a relationship between innovation and management of some of these

stakeholders (Loewe & Chen, 2007; Bstieler, 2005; Li et al., 2010; Laforet, 2011; Kotey, 2014, Faherty & Stephens, 2016).

5.3.3.6 Management of external stakeholders

Senior employees were asked to explain how their MSMEs manage their relationship with external stakeholders such as customers, suppliers, competitors, regulators and providers of finance. Most of the senior employees interviewed indicated that they always strive to develop and maintain a good relationship with customers. This was emphasised more by the senior employee of case CL6, a MSME which deals in clothes who gave the following comment:

"In our industry successful enterprises are those which are able to create and maintain a good relationship with their customers. Our enterprise always tries to develop a personal relationship with customers so that they will always come back to us for repeat purchases. This is done by keeping contact details for all new customers and giving them special offers on any of their future purchases. We also contact the customers in our database whenever we have new products in stock in an attempt to influence a repeat purchase."

A senior employee of case GR2, which deals in grocery also indicted that his enterprise always attempt to retain customers by maintaining a clean environment in the grocery shop and arranging products on shelves in an attractive way. He indicated that in grocery business it is not easy to keep a personal relationship with customers like for example recording the contact details and maintaining a database of customers. This is because the volume of customers who comes in and out of the shop at any particular time is very high and difficult to monitor.

The need for managing competition was pronounced more by the senior employees of MSMEs in the clothing industry as there is stiff competition for MSMEs operating in that industry. Senior employees of cases CL2, CL3, CL7, and CL10 indicated that they always monitor the activities of their competitors in an attempt to manage competition. They also indicated that they always compare their activities to those of their competitors through benchmarking. A number of studies have highlighted the need for a company to benchmark its activities to those of its competitors (Afonso & Cabrita, 2015; Taschner, 2016). The senior employees also revealed that they usually monitor the competitors' product lines, fast moving goods, slow moving

goods, and customer base. A number of senior employees revealed that they network with their competitors in a way that results in mutual benefits to all the parties involved. For example, some MSMEs indicated that they source inventory jointly as a team in order to share costs and benefit from economies of scale. A senior employee of FE1 which supplies furniture and electrical goods indicated that her MSME refers its customers to one of its competitors whenever it does not have goods in stock and the competitor does the same.

Some senior employees of MSMEs in the grocery industry indicated that competition was not much of a concern in grocery industry. For example, the senior employee of case GR1, which deals in groceries, highlighted that sales demand for grocery products depend on the place in which the grocery shop is located and is not affected much by competition. He revealed that his grocery shop was located in a densely populated area and always record high sales volume than those grocery shops in less populated areas.

Most senior employees interviewed indicated that they had good relationship with their suppliers. Majority of the MSMEs which deal in clothing and electrical gadgets get their goods for resale from China and South Africa. Those dealing in grocery and furniture source most of their goods from the local market. In terms of management of regulators, the majority of senior employees interviewed stressed the need to maintain a good relationship with the tax authorities. However, none of the senior employees indicated that they monitor their relationship with the tax authorities.

Generally most senior employees stressed the need for MSMEs to effectively manage their relationship with internal and external stakeholders in order to succeed and survive. This position makes Freeman (1984)'s stakeholder theory and Kleiner (1986)'s open system theory relevant for this study.

5.3.3.7 Cost management

Management of costs was perceived by all the twenty senior employees as key in the survival of MSMEs. Almost all the senior employees interviewed, indicated that it was impossible for MSMEs to be profitable without managing their costs. This was emphasized more by senior employees of grocery shops, GR1, GR2, and GR3. For example, the senior employee of case GR3 gave this comment:

"You cannot survive in the grocery business if you do not manage costs. The profit margins for most of the goods we sell are very low. It is, therefore, imperative for us to manage inventory ordering and holding costs, administration costs, selling and distribution costs."

The senior employees of most of the MSMEs indicated that one of the major cost elements which needed to be managed was tax. Most of the MSMEs, especially those registered for value added tax, indicated that the tax authorities are always after them. The senior employee of case CO3 gave the following revelation regarding his enterprise's experience with the tax authorities:

"Tax is a major burden in our operation. Three years ago our bank account was garnished by the Zimbabwe Revenue Authority for failing to remit VAT on time. We have not managed to recover from the effects of the garnish order and this has partly contributed to the losses that we have reported in the last three years."

The sentiment expressed above by the employee of CL11 is also echoed by Nyamwanza *et al.* (2014) who indicated that most MSMEs in Zimbabwe do not comply with tax laws.

The cost of borrowing was also regarded as another cost element which needed to be managed in the case of those MSMEs which had managed to get finance from financial institutions. Senior employees of cases CL5, CL8, GR2, CO3, and CL11 revealed that they were finding it difficult to repay loan instalments on time. The senior employee of case CL11 gave the following revelation regarding borrowing costs:

"When we managed to access a loan from a financial institution two years ago, we thought that our financial problems were over. Little did we know that this was the beginning of more problems. The economy has not been friendly to us. Revenue inflows have been very low due to the depressed income and liquidity challenges which we have been experiencing this year. We have failed to repay loan instalments for the past five months and we are in the process of negotiating for a payment plan for the instalment arrears."

The above comment supports the claim by Frazer et al. (2012) that having access to finance will not always result in the success and survival of an enterprise since such

finance may result in the enterprise having higher levels of debt if the source is a loan. The senior employees were asked to express their views on whether or not there is a relationship between the overall costs of the enterprise and the management of costs relating to suppliers, regulators, and providers of finance. All the senior employees had a consensus that a relationship exists between the above variables.

5.3.3.8 Revenue management

Sales revenue was the most measured variable in MSMEs. All the senior employees indicated that they recorded daily revenue and any increase in revenue resulting from an increase in sales volume or selling price is always accounted for. A number of senior employees disclosed that they prepared periodic sales budgets and always investigate the causes of any positive or negative sales revenue variances from time to time. The senior employees were also asked on their perceptions regarding existence of a relationship between their enterprise's customer and competitors' management initiatives and the level of annual revenue. Figure 5.6 is a summary of the responses of the senior employees regarding their perceptions on the strength of the relationship between level of revenue and management of customers and as well as management of competitors.

	Customer management			
	Strong relationship	Moderate relationship		
	CL1, CL2, CL4, CL10, CL6, CL8, CO1, CO2, CO3.	CL3, GR2, FE1, FE2.		
une	Not sure	No relationship		
Level of revenue	CO2, GR3	CL2, CL5, CL7, GR1, GR4.		
	Competitors' management			
	Strong relationship	Moderate relationship		
	CL1, CL3, CL2, CL5, CL7.	CL2, CL4, CL10, CL6, FE2.		
	Not sure	No relationship		
	GR1, FE1.	CO2, GR3, CL8, CO1, CO2, CO3, GR4.		

Figure 5.6: Strength of relationship of level of revenue and customer/competitor management matrix

The results in Figure 5.6 suggest that there is a strong to moderate relationship between the level of revenue and level of customer management and competitor management for those MSMEs which specialise in non-grocery items such as clothing and furniture. Previous studies indicate that an enterprise that meets the needs of its customers is likely to report high sales (Shi & Yu, 2013; Laukkanen *et al.*, 2014). The senior employees of cases CL2 and CL10 highlighted that the clothing items they traded in were distinct from similar clothing items sold by their competitors. The senior employee of case CL10 further emphasised that clothing items were unlike grocery items which are generally the same irrespective of the brand sold. Hence, the need for his enterprise to market and advertise its clothing items to customers.

Generally most of the senior employees of grocery shops indicated that their level of revenue was not related much to the level of customer and competitor management. Probably this is because the goods they trade in are basic commodities and there is no much need for the retailers to market the goods. This point is supported by the senior employee of case GR2 who indicated that:

"We normally do not market or advertise the goods we sell. The marketing and advertising of the brands we sell is done by the manufacturers of the goods and not us. They advertise and market their brands through local media, roadshows, and in-store merchandisers."

5.3.4 SUMMARY OF CHAPTER

Generally, most senior employees interviewed indicated that the performance measurement practice of MSMEs in the retail sector in Zimbabwe is generally very low and inadequate. Perhaps, this confirms the argument from previous studies that measurement of performance in MSMEs is informal and unplanned (Bourne *et al.*, 2000; Sainidis *et al.*, 2001; Phillips & Shanka, 2002). A number of senior employees expressed the need for measuring the performance of MSMEs in order to enhance their success. Most of the aspects which the officers proposed should be measured are included in the performance measurement framework developed in the quantitative part of the study. However, most officers highlighted the importance of innovation in MSMEs. This suggests that the level of innovation needs to be monitored and should be part of the framework.

CHAPTER SIX: THE PROPOSED PERFORMANCE MEASUREMENT FRAMEWORK

6.1 INTRODUCTION

In the previous chapter the extent of measurement of CSFs for the retail MSMEs, in Harare, Zimbabwe was investigated The chapter also explored the relationship between the extent of measurement of the CSFs, level of profit and number of years the MSMEs has been in operation. This chapter presents the performance measurement framework for the retail MSMEs in a developing country, with Harare, Zimbabwe being the focus of the study. The performance measurement framework is informed and guided by previous literature and data gathered during the study process. The framework seeks to provide a guideline on the performance measures which the MSMEs should place emphasis on in order to enhance their success and survival. It proposes the CSFs for the performance of MSMEs and the most important measures of the CSFs as informed by the study.

The performance measurement framework that emerged from the questionnaire responses of owner/managers and interview responses of senior employees in the accounts/finance section of the MSMEs is presented in Section 6.2, figure 6.1. The framework is still work in progress at this stage. The final framework emerges after theoretical validation by selected owner/managers. The perceptions of the owner/managers on the usefulness of the provisional framework displayed in figure 6.1 are presented in Section 6.3 and the final proposed framework is presented in section 6.4, figure 6.2.. The chapter concludes with a summary in Section 6.5.

6.2 THE PROVISIONAL FRAMEWORK EMERGING FROM QUANTITATIVE AND QUALITATIVE STUDY.

The provisional performance measurement framework developed based on questionnaire responses of owner/managers and interview responses of senior employees in the accounts/finance section of the MSMEs is presented in figure 6.1. Exploratory factor analysis, Spearman correlation, regression analysis and decision tree tests were performed to identify those factors which may have an influence on the success and survival of MSMEs. The resulting framework is presented in figure 5. 2. As highlighted earlier in this study, the indicators of success and survival adopted in this study were the average level of net profit margin in the last three

years and number of years the MSME has been in operation. Therefore, those CSFs whose extent of measurement had a positive relationship with either level of profit or number of years the MSMEs have been in operation were considered to be CSFs for the success and survival of MSMEs.

The Spearman correlation test involving the extent of measurement of the CSFs and the level of profit indicated that all the CSFs had statistically significant correlations with level of profit. However, only extent of measurement of cost management, customer management, and training and development had a positive correlation with number of years the MSME had been in operation. The stepwise linear regression analyses identified customer management, market scanning, cost management, regulators management and employee motivation as the CSFs with a statistically significant relationship with level of profit while cost management was the only CSF factor identified as having a positive relationship with number of years in operation.

Although innovation was not selected to be an element of performance measurement framework during the analysis of quantitative data, most of the senior employees interviewed strongly argued that it is a critical success factor and should be included in the performance measurement framework. The review of literature also revealed that innovation is the most important CSF for MSMEs (Talke et al., 2011; Al-Ansari et al., 2013; Hossain & Kauranen, 2016; Faherty & Stephens, 2016). Hence, the factor innovation is included in the performance measurement framework based on the persuasion of the senior employees in the accounts/finance section of the MSMEs. It was also the factor that had the highest number of items selected during the validation of the questionnaire through factor analysis. Thus, the factor was very prominent in the framework which emerged from the factor analysis. However, there is need for being conservative in selecting the performance measurement items to be considered under the innovation factor in the performance measurement framework as the inclusion of the factor is subjective and not based on regression analysis as is the case for other factors. As a result only those items of innovation with high factor loadings (0.60 and above) will be considered. Matsunaga (2010) suggests a factor loading cut-off limit of 0.60 for those researchers who are conservative in item selection. This criterion led to the selection of the following items:

Table 6.1: Innovation items included in the framework

Innovation items	Factor loading
Amount of time devoted to developing new ideas	.764
Level of research and development activities	.740
Number of new services/processes from R & D	.739
Number of new ideas generated	.732
Number of innovation meetings held	.705
Number of new ideas tested in market	.695
Number of new markets developed from R & D	.677
Number of new skills developed	.656
Number of new ways of operating	.628
Amount of resources committed to developing new brands	.600

The provisional performance measurement framework which emerges after inclusion of the innovation CSF is presented in figure 6.1. This is the framework which is theoretically validated by selected owner/managers so as to come up with the final framework.

Framework Based On Quantitative Study And Qualitative Study

Market scanning

Innovation

Employee motivation

Management of:

Frequency of gathering and reporting market information on:

- * customers
- * performance of products in different markets
- * suppliers
- * competitors

Number of key decisions made by employees

Amount of:

- * time devoted to developing new ideas
- * resources committed to developing new brands

Level of research and development activities

Number of

- * new services/processes from R & D
- * new ideas generated
- * innovation meetings held
- * new ideas tested on the market
- * new markets developed from R & D
- * new skills developed
- * new ways of operating

Level of:

- * willingness to have unpaid overtime
- * staff morale
- * performance related incentives
- * willingness to go an extra mile
- * labour turnover

Number of training programs attended by employees

Customers

Number of:

- * after sale customer services
- * changes in response to market changes
- * customers per full time employees
- * customer complains
- * customers referred by other customers
- * years a customer purchased from the enterprise
- * suggestions from customers
- * regular customers lost customers
- * surveys to get customer feedbacks

Percentage change in sales volume of each product

Costs

Level of reduction in:

- * electricity costs
- * discounts allowed
- * communication
- expenses
 * council bills
- * labour cost
- * transport costs
- * bad debts
- * inventory holding costs

Level of discount from suppliers forgone

Levle of security of inventory from pilferage

Regulators

Number of: times the enterprise:

is penalised by tax authorities

pay tax by due date is penalised by city authorities

is penalised by a monitoring board

pay licence fees by due dates

Number of membership to industry associations

Figure 6.1: The proposed performance measurement framework

6.3 PERCEPTIONS OF SELECTED OWNER/MANAGERS ON THE UTILITY OF THE PROPOSED PERFORMANCE MEASUREMENT FRAMEWORK

Owner/managers from eight MSMEs were interviewed to assess the extent to which the proposed performance measurement framework can be used to influence the success and survival of the MSMEs. One presumably successful and one, presumably struggling retail MSME, from each category of retail MSMEs under study was selected using purposive sampling method. For this purpose successful MSMEs were those which made profit and unsuccessful MSMEs were those which made losses for three consecutive years. Table 6.3 presents codes and categories of the MSMEs selected for the interviews based on the above criterion.

Table 6.3: MSMEs interviewed to give perception on utility of performance measurement framework

Code of MSME	Profitable or unprofitable	Class of goods sold
CLP	Profitable	Clothing
FEP	Profitable	Furniture/electricals
GRP	Profitable	Groceries
СОР	Profitable	Combined
CLU	Unprofitable	Clothing
FEU	Unprofitable	Furniture/electricals
GRU	Unprofitable	Groceries
COU	Unprofitable	Combined

The owner/managers were asked to express their opinions on the extent to which the proposed performance measurement framework can be used to measure the performance of their particular MSMEs and on whether such measurement can enhance the success and survival of the MSMEs. The owner/managers were asked to suggest any improvement to the performance measurement framework. The major highlights of the responses of each owner/manager interviewed are presented below.

6.3.1 Response of owner/manager of CLP

CLP represented profitable and, therefore, successful retail MSMEs which specialises in clothing. The owner/manager of CLP indicated that their enterprise was already measuring some aspects of the proposed performance measurement framework presented, although not in the manner and context presented in the framework. This is what the owner/manager had to say:

"In our industry we are very much concerned and committed in the management of customers, competitors, regulators, and access to finance. I think the performance measurement framework is functional since it encompasses some of these aspects. In this industry you cannot survive without managing your customers and competitors. We strive to establish and maintain long term relationship with our customers through getting customer feedbacks and referral of new customers by existing customers. We also manage competition by networking with our competitors and sharing resources and facilities for mutual benefit where necessary."

The above response from the owner/manager is in line with the views expressed in previous studies. For example, successful MSMEs are reported to have close contact with their customers (Feindt *et al.*, 2002; Bulak *et al.*, 2016) and develop a close and trusted relationship with its customers (Azmat & Samaratunge, 2009; Azmat & Samaratunge, 2013; Shi & Yu, 2013). The successful MSMEs also network with their customers and competitors (Taipale-Erävala, Heilmann & Lampela, 2014).

The owner/manager of CLP indicated that although his enterprise tries to comply with regulations every time, especially tax laws, they did not have a formal procedure for measurement and monitoring their level of compliance to the regulations. He was encouraged by the fact that the proposed framework emphases on a number of critical success factors that should be measured and how they should be measured. He was however sceptical on the possibility of measuring employee motivation. However, previous studies suggest the possibility of measuring employee motivation (McKenna, 2005; Bartunek & Spreitzer, 2006; Krüger & Rootman, 2010; Hutchinson et al., 2015; Berko et al, 2016; Valaei & Rezaei, 2017). When asked to express his opinion on the applicability of the performance measurement framework, the

owner/manager was very optimistic that the performance measurement framework could help enhance the success and survival of MSMEs.

6.3.2 Response of owner/manager of FEP

The owner/manager of FEP represented successful MSMEs in the furniture and electrical appliances category. The owner/manager indicated that his enterprise has a performance measurement framework in place which is different from the performance measurement framework being proposed in this study but which measures essentially the same aspects. He however revealed that their performance measurement framework does not address aspects such as management of market scanning, management of regulators, and innovation to the extent suggested by the proposed performance measurement framework. Below is his comment regarding the practical usefulness of the proposed performance measurement framework:

"Generally the performance measurement framework you are proposing is a step in the right direction. The framework has a potential to make MSMEs formalise their operations. As you can see, the framework covers a number of areas that are very important in running a business. As you might be aware, most of the MSMEs are owned and run by people who have no formal training in business management. Therefore, a simple and easy to follow performance measurement framework will definitely be of use to such owner/managers."

The response by owner/manager of FEP supports aguments presented in previous studies that there is need for a simple performance measurement for MSMEs (Garengo *et al.*, 2005; Cocca & Alberti, 2010; Nudurupati, Bititci, Kumar & Chan, 2011; Ates *et al.*, 2013; Pekkola *et al.*, 2016) However, the owner/manager had problems with measures such as level of staff morale. His major concern was that the framework does not clarify how level of staff morale is to be measured. Previous studies suggests that staff morale can be assessed by referring to aspects such as levels of absenteeism from work; willingness to go an extra mile; staff turnover; and performance related incentives (Shepherd & Mathews, 2000; Ntalianis *et al.*, 2015).

6.3.3 Response of owner/manager of GRP

GRP is a MSME which deals in grocery only and was profitable and, therefore, presumed to be successful. The owner/manager indicated that the enterprise was already measuring most of the performance measures suggested in the framework

although in an informal and inconsistent manner. However, the owner/manager was of the view that the framework does not cover important aspects such as level of working capital, competitors' fast moving goods, competitors' slow moving goods and number of competitors closing business. The owner/manager also suggested that the framework should include the time it takes for suppliers to deliver goods. He indicated that in the grocery business, the most important stakeholders who needed to be managed were customers, competitors, and suppliers. Therefore, according to him any aspects which aim to establish and maintain a relationship with these key stakeholders should be incorporated into the framework. The views expressed by the owner/manager of GPR are consistent with arguments posited by some authors that the most important stakeholders for retail enterprises are customers, suppliers and competitors (Tari et al., 2007; Tucker & Pitt, 2009; Rajagopal, 2010; Shi & Yu, 2013; Mohd Mokhtar et al., 2014; Masocha & Charamba, 2014; Talib et al., 2014).

When asked to express his views on the practical usefulness of the proposed framework this is what he had to say:

"I think this framework will go a long way in encouraging MSMEs to pay attention to a number of aspects that affect their business as it is broad based. If we adopt this framework we are more likely to pay attention to a number of issues we have been taking for granted for a long time. For example up to now there was never a time when we ever attempted to measure innovation and employee motivation. It will be very exciting to see what would happen if we are to monitor the level of commitment of our employees as suggested by this framework."

6.3.4 Response of owner/manager of COP

COP is a MSME dealing in clothing, grocery, furniture, and electricals which was profitable and, therefore, presumed to be successful. The owner/manager indicated that his enterprise does not measure most of the aspects presented in the proposed performance measurement framework. He was very doubtful that the proposed performance measurement framework may enhance the success and survival of most struggling MSMEs. He did not mince his words and gave the following blunt comment:

"I do not think this performance measurement framework may be of much practical use to many MSMEs. It is complicated and covers a lot of aspects that are likely to be foreign and, therefore, irrelevant to most of the informal MSMEs operating in the retail sector in Zimbabwe. As for us we are only concerned with profit. We will sell whatever product we find to be profitable and this is what has kept us this far. The strategy of selling different types of products under one roof always pays dividends for us."

Although the owner/manager of COP indicated that his MSME did not measure most of the aspects presented in the proposed performance measurement framework, further discussion with him gave an impression that the owner/manager's enterprise did actually measure most of the aspects presented in the provisional framework but in an informal manner. This observation is in line with the claim by some researchers that MSMEs conduct their business in an informal manner (Bourne, Mills, Wilcox, Neely & Platts, 2000; Sainidis, Gill & White, 2001; Phillips & Shanka, 2002; Ates *et al.*, 2013; Klovienė & Speziale, 2015).

6.3.5 Response of owner/manager of CLU

CLU is a MSME that specialises in clothing and which made a loss for the past three consecutive years and is, therefore, presumed to be an unsuccessful MSME. The owner/manager attributes the loss to failure to manage costs as well as competition. The owner/manager indicated that his enterprise did not have any performance measurement system in place. The owner/manager was asked to express his opinion on the practical usefulness of the proposed performance measurement framework and had this to say:

"Definitely the proposed performance measurement framework will change our mind-set regarding the need to monitor performance. Most of us have never been introduced to the concept of measuring performance beyond profit measures. The idea of measuring aspects such as employee motivation and management of regulators is foreign to us. I am very sure that it will not be business as usual for those MSMEs which opt to adopt this framework" The owner/manager was however, of the view that the proposed performance measurement framework covered too many aspects some of which may not be relevant to most MSMEs."

The owner/manager of CLU re-emphasised the need for having a simple performance measurement framework as pointed out by previous researchers (Garengo *et al.*, 2005; Cocca & Alberti, 2010).

6.3.6 Response of owner/manager of GRU

GRU is a perennial loss making grocery shop which is presumed to be facing viability challenges and, therefore, whose going concern state is questionable. The owner/manager of the MSME unequivocally emphasised the need for an enterprise to measure and monitor its performance if it is to be successful. She indicated that she was new to the enterprise. One of the reasons she suspects to have contributed to the losses the enterprise had been incurring had to do with failure to manage various stakeholders. She was upbeat that the proposed framework may be useful to her enterprise as it focused on measurement of performance from a stakeholder perspective. Her views are inclined to the views of some authors who argued for the need to manage the MSME's stakeholders (Bstieler, 2005; Loewe & Chen, 2007; Li, Zhou & Si, 2010; Laforet, 2011). The owner/manager indicated that she was keen on testing the performance measurement framework in her enterprise.

6.3.7 Response of owner/manager of FEU

FEU is an entrprise which deals in furniture and electrical products. The enterprise incurred losses in the last three consecutive years and is, therefore, classified under those MSMEs which are likely to face viability problems. The owner/manager of the MSME indicated that his enterprise had been incurring losses in spite of having a performance measurement system in place. He did not have kind words for the proposed performance measurement framework and stressed that a performance measurement framework can never be a panacea for the success of an enterprise. Below are some of his comments:

"I do not hold the view that the performance measurement framework you are proposing can enhance the success and survival of MSMEs in the retail sector in Zimbabwe. Most of those MSMEs who are incurring perennial losses have a performance measurement system in one form or another. Your performance measurement framework is too theoretical and academic in nature and is divorced from real issues faced by MSMEs on the ground."

When the owner/manager was asked to explain the key elements of the performance measurement system his enterprise was using, he could not reveal the key elements. This made it very difficult for the researcher to verify the claims by the owner/manager that his enterprise had a performance measurement system in place.

6.3.8 Response of owner/manager of COU

COU is an enterprise specializing in clothes, grocery, furniture, and electrical items. The MSME incurred losses in the last three consecutive years and may face viability problems in future. The owner/manager of the MSME was clueless on the concept of performance measurement. The owner/manager regarded profit as the only aspect of business that could be measured. When asked to expresses his views on the practical utility of the proposed performance measurement framework, the owner/manager indicated that he could not express an opinion as he was finding it difficult to comprehend the proposed framework.

6.4 THE FINAL PROPOSED PERFORMANCE MEASUREMENT FRAMEWORK

The final performance measurement framework incorporates the recommendations of owner/managers interviewed. Some owner/managers indicated that the framework does not adequately consider management of competitors. It emerged from the interviews that one of the causes of poor performance witnessed by some MSMEs was failure to manage competition. Although the market scanning CSF focuses on competitors, the focus is on activities of competitors on the market in general. It does not focus on the effect of competitors activities on the enterprise. Hence, the final performance measurement framework has the competitor management CSF as recommended by the owner/managers interviewed. The final proposed performance measurement framework is portrayed in Figure 6.2.

Final Proposed Performance Measurement Framework For Retail MSMEs

Market scanning

Innovation

Employee motivation

Management of:

Frequency of gathering and reporting market information on:

- * customers
- performance of products in different markets
- * suppliers
- * competitors

Number of key decisions made by employees

Amount of:

- * time devoted to developing new ideas
- * resources committed to developing new brands

Level of research and development activities

Number of

- * new services/processes from R & D
- * new ideas generated
- * innovation meetings held
- * new ideas tested on the market
- * new markets developed from R & D
- * new skills developed
- * new ways of operating

Level of:

- * willingness to have unpaid overtime
- * staff morale
- * performance related incentives
- * willingness to go an extr mile
- * labour turnover

Number of training programs attended by employees

Customers

Number of

- * after sale customer services
- * changes in response to market changes
- * customers per full time employees
- * customer complains
- customers referred y other customers
- * years a customer purchased from the enterprise
- * suggestions from customers
- * regular customers lost

customers

* surveys to get customer feedbacks

Percentage change sales volume of eac product

Costs

Level of reduction

- electricity costs
- * discounts allowed
- * council bills
- * labour cost
- * transport costs
- * bad debts
- * inventory holdir costs

evel of discount rom suppliers orgone

Levie of security inventory from pilferage

Regulators

mes the

- tax authorities
 pay tax by due
- date is penalised by
- city authorities
- monitoring boar
- pay licence fees by due dates Number of
- membership industry associations

Competitors

Number of:

- * new entrants
- * competitor exits

 * competitors the
- enterprise networks with * times the
- * times the company compares its activities to those of competitors

Figure 6.2: The Final proposed performance measurement framework

The final performance measurement framework developed in this study has seven CSFs. Five of the CSFs emerged from quantitative study, while innovation emerged from the interviews with senior employees and competitor management from interviews with selected owner/managers. The concern raised by some owner/managers that the framework has too many measures is justified. Some MSMEs may not have resources to implement the framework as it is. This is a generic framework for use by retail MSMEs and each MSME may consider selecting those measures that are more applicable to it if does not have the resources to implement the framework as it is.

6.5 SUMMARY

The proposed performance measurement framework focuses on the extent of measurement of those factors presumed to have an impact on the performance and survival of MSMEs. These factors referred to in this study as CSFs, are management of customers, management of costs, market scanning, management of regulators, employee motivation, innovation and competitor management. The performance measures for these factors are the number of activities or the level of activities which the MSME carries out in an attempt to manage the CSFs.

Generally most owner/managers were of the view that the proposed framework may be useful in enhancing the success and survival of retail MSMEs in Zimbabwe. Some indicated that the proposed framework can be adopted as it is while others felt that there was need for the framework to be amended to meet each MSME's unique circumstance. There was also a concern by some owner/managers that the performance measurement framework has too many items and may not be easy to implement in small enterprises.

In the next chapter the conclusions, recommendations, and future work are presented.

CHAPTER SEVEN: SUMMARY, CONCLUSION, AND RECOMMENDATION

7.1 INTRODUCTION

In the previous chapter the researcher presented a proposed performance measurement framework and the perceptions of eight owner/managers on the practical usefulness of the proposed framework. The chapter also presented the final performance measurement framework which incorporated the suggestions of the owner/managers interviewed. This chapter highlights the most important findings, conclusions drawn from the study, limitations of the study, and recommendations on performance measurement in retail MSMEs. Recommendations on further areas for study are also presented.

The aim of the study was to develop a performance measurement framework to enhance the success and survival of retail MSMEs in developing countries with Harare, Zimbabwe being the focus of the study. The performance measurement framework was designed based on the literature review and an empirical study. The literature review managed to identify the CSFs which influence the performance of enterprises in general. The summary is presented according to research questions in order to achieve clarity.

7.2 SUMMARY OF FINDINGS

The first objective of the study was to identify the factors presumed to be critical for the success of MSMEs. This objective was achieved by carrying out an extensive review of extant literature. The review of literature identified the CSFs for the performance of MSMEs as owner/manager commitment; employee commitment; business planning; management of information, sources of finance; revenue, costs, innovation, customers, suppliers, and competitors; the enterprise's pool of resources, and conformance to regulations.

The second objective of the study was to investigate the current performance measurement practice of retail MSMEs in Zimbabwe. The performance measurement practice investigated was in respect of the CSFs identified during the literature review. In order to identify the performance measurement practice of the retail MSMEs, questionnaires were sent out to owner/managers of MSMEs and interviews held with the most senior employees in the accounts/finance sections of the MSMEs. Data was analysed using descriptive statistics in order to identify the

performance measurement practice of the MSMEs. The performance measurement practice of each CSF is summarised below. In terms of performance measures relating to owner/manager commitment, it was established that most MSMEs usually assess the number of meetings attended or convened by owner/managers as well as number of new business contacts initiated by owner/managers. They also assess the number of new markets ventured into with the blessing of the owner/manager and amount of resources committed by owner/manager to ventures with unknown outcomes. Most MSMEs also record the amount of funds committed towards training programmes per given period, number of employer initiated training programmes, number of courses attended by owner/manager per any given period, number of educational programmes attended by employees, the number of employees trained on employer's costs and the number of self-directed business actions pursued by employees.

The performance measures relating to owner/manager commitment which are either not measured at all or rarely measured by most MSMEs are the number and impact of decisions made by most owner/managers and number of new products introduced into existing market with the blessing of the owner/manager. The other aspects not measured are those which relates to involvement of employees like number of employee feedback meetings arranged by employer per given period and number of key responsibilities assigned to employees by the owner/managers. The performance measures relating to employee commitment are generally not measured by most MSMEs. The only aspect which is usually measured by most of these MSMEs is employee work attendance. Therefore, measures relating to employee involvement in decision-making, job satisfaction and staff loyalty are rarely measured.

In respect of business planning, most MSMEs pay attention to the number of marketing plans and financial plans and less attention to the frequency of strategic planning meetings. The aspects that are never measured or evaluated by most MSMEs are the amount of resources needed in future and the number or level of formal policies that guide decisions in operations. Results on management of information indicate that most MSMEs usually gather and report information relating to performance of products in existing markets, performance of products in new markets, the enterprise's customers, and the enterprise's suppliers. Information on

the enterprise's competitors is rarely gathered and reported while information on regulatory authorities, enterprise's sources of finance and integration of the enterprise's ICT are never gathered and reported.

The extent of measurement of variables relating to innovation is generally low. Responses of owner/managers indicated that most MSMEs never or rarely measure variables relating to product/service innovation, process innovation, position innovation, focus on new abilities, and research and development activities. Most owner/managers also reported that they never or rarely measure most of the variables relating to management of enterprise resources. Performance measures on intangible resources, human resources and financial resources are generally never or rarely measured. However, there is sufficient measurement and monitoring of measures relating to tangible assets.

The responses of owner/managers revealed that generally most MSMEs do not measure variables relating to management of their external stakeholders such as customers, suppliers, competitors, providers of finance and regulatory authorities. For example, most MSMEs never or rarely measure variables relating to customer management such as customer focus, customer loyalty, customer retention, market share, customer satisfaction, market reputation of the enterprise, long term customer relationship, customer base, customer service and market responsiveness.

The responses of owner/managers indicate that most MSMEs never or rarely measure or monitor all the variables relating to competitor management such as knowledge of the enterprise's competitors, knowledge of the competitor's business, taking advantages of the competitor's weaknesses, extent of benchmarking activities and competitors' market share. The extent of measurement of variables relating to supplier management is even worse, where the MSMEs rarely measure the extent of the relationship with suppliers, delivery period, and discount received. When it came to management of regulators, most owner/managers also indicated that they do not assess their level of compliance to city by-laws, industry associations' best practices, and monitoring bodies' standards. However, it was encouraging to note that a number of MSMEs reported that they assess level of compliance to various tax laws. In respect of management of sources of finance, most MSMEs usually measure internal sources of finance such as the resources contributed by the owners of the

enterprise and the retained earnings. Most MSMEs never or rarely assess and monitor trade credit from suppliers and loan from financial institutions.

On measurement and monitoring of variables relating to costs, the extent of measurement of the variable is too low and unsatisfactory for most of the variables. Most MSMEs never or rarely measure performance measures relating to inventory control, transaction costs and level of bad debts. However, most MSMEs usually measure costs relating to operation. The CSFs whose variables were measured by most MSMEs had to do with revenue and profit. Most of the MSMEs monitor revenue through assessing changes in sales volume and selling price. Most MSMEs usually measure increase in gross profit and net profit. As for profitability ratios, most MSMEs never or rarely assess the enterprise's profitability ratios. Profitability ratios such as net profit per employee, net profit per customer, return on assets, return on investment, and return on capital employed are never measured or rarely measured.

In terms of interviews, the senior employees in the accounts/finance section of the MSMEs gave responses which were generally in line with the responses of the owner/managers though expressed differently. Most employees indicated that their MSMEs measured performance in one way or the other. According to the senior employees most MSMEs measured financial performance such as profit, costs, and revenue. Non-financial aspects such as owner/manager commitment, employee commitment, management of regulators and access to finance are never or rarely measured. However, some MSMEs assess and monitor the performance measures related to external stakeholders such as customers, suppliers, and competitors.

The third objective of the study sought to determine the relationships between the extent of measurement of the CSFs determined from the empirical study, net profit margin, number of years the MSMEs had been in operations and number of full time employees for each MSME. The relationships were investigated through conducting Spearman correlation test. Before carrying out the correlation tests, a factor analysis was carried to identify the CSFs based on the empirical study, and reliability test carried to identify those CSFs which could be used in further tests. The extent of measurement of all the CSFs was positively correlated the MSMEs' level of profit margin. However, only the extent of measurement of cost management, customer management, and training and development had a positive correlation with the number of years the MSME had been in operation. The size of the company as

measured by number of employees was only positively correlated to the number of years the MSMEs had been in operation. There was also a positive correlation between the extent of measurement of each CSF and other CSFs, as well as between the extent of measurement of each CSF and the perceived level of the CSF.

The fourth objective of the study was to determine the CSFs whose extent of measurement has an influence on the profitability and number of years the retail MSMEs have been in operation. This was achieved through conducting a multiple regression analysis. The CSFs which were identified to have an impact on the level of profit were customer management, cost management, market scanning, employee motivation, and management of regulators. Only the extent of measurement of management of costs was identified to have an impact on number of years the MSMEs had in operation.

The fifth objective of the study was to develop a performance measurement framework applicable to MSMEs in the retail sector of a developing country. This was the main objective of the study and depended on other objectives highlighted above. The proposed performance measurement framework was developed based on the literature review and empirical study. The CSFs which had statistically significant relationship with the profit margin and number of years the MSMEs had been in operation became elements of the proposed framework. Innovation was included in the framework based on the recommendation of senior employees in the accounts/finance department.

The sixth objective of the study sought to get the views of selected owner/managers on the extent to which the proposed performance measurement framework can be used to influence the success and survival of MSMEs. Generally most of the owner/managers interviewed were of the view that the performance measurement framework may be used to improve the overall performance of the MSMEs. However, some of the owner/managers indicated that in order for the proposed framework to be useful, there is a need for each MSME to amend the framework in order to meet its own unique circumstances rather than adopting the proposed framework as it is. Out of the eight owner/managers interviewed, two had the perception that the proposed performance measurement framework was too academic and may not be applicable in real situations which MSMEs are confronted

with on a daily basis. Most owner/managers interviewed were of the view that the performance measurement framework left out management of competitors yet it is one of the CSFs contributing to the poor performance of most MSMEs. This prompted the researcher to include some measures of competitor management despite the fact that the CSF had not been selected in earlier analyses.

7.3 HOW OBJECTIVES WERE ACHIEVED

How the objectives of the study were achived is portrayed in Table 7.1.

Table 7.1: Objective achievement

	Research Objective	Achievement of objective	How achieved
1	To identify the critical success factors for the performance of MSMEs	The objective was achieved in Chapter 3, sections 3.4.3, 3.6, and 3.7; and chapter 5, section 5.3.3. This objective was achieved through an extensive review of extant literature on factors influencing the performance of MSMEs and interviewing a sample of senior employees in the accounts section of the MSMEs. The CSFs for the performance of MSMEs identified from past studies are commitment of the owner/manager, business planning, management of information, management of revenue and costs, innovation, management of customers, management of suppliers, management of competitors, the enterprise's pool of resources, conformance to regulations and management of sources of finance. Senior employees in the accounts section were then interviewed to get their perceptions on the extent to which the factors identified from literature review influence the performance of their MSMEs.	Literature review Interviews with senior employees in the accounts section
2	To investigate the current performance measurement practices of retail MSMEs in Harare, Zimbabwe	The objective was achieved in sections 5.2.2 and 5.3.2. Questionnaires were administered to owner/managers to investigate the extent to which they measure the CSFs identified in the literature review. The responses were than analysed using SPSS version 20 and results are presented in section 5.2.2. Interviews were help with senior employees in the accounts section and responses are presented in	 Questionnaires to owner/managers Interviews with senior employees in the accounts section

	Research Objective	Achievement of objective	How achieved
		section 5.3.2	
3	To establish the relationships between the extents of measurement of the proposed critical success factors	The objective was achieved in sections 5.2.3.7 and 5.3.3. The exploratory factor analysis conducted to validate the questionnaire resulted in ten factors (constructs) namely: innovation, cost management, training and development, competitor management, customer management, sources of finance, market scanning, employee motivation, regulators management and return on capital. Thus, the factors whose relationship was tested were those which emerged from the factor analysis and not review of literature.	 Spearman correlation Interviewing senior employees
		The relationship between these new factors was tested using Spearman correlation. Interviews held with senior employees investigated the relationships between the CSFs identified from literature review.	
4	To determine the critical success factors whose extent of measurement has an influence on the performance of retail MSMEs	The objective was achieved in sections 5.2.3.8, 5.2.3.9, and 5.2.3.10. The objective was achieved through analysing the relationship between extent of measurement of the factors which emerged from exploratory factor analysis and net profit margin. The relationship between extent of measurement of the factors and number of years the MSME had been in operation was also tested	 Multiple regression analysis (full model). Stepwise multiple regression analysis. Decision tree
5	To develop a performance measurement framework applicable to MSMEs in the retail sector	The objective was achieved and the performance measurement framework is presented in Table 6.2. The framework was developed from the analyses performed to achieve objective 4 and interviews held with senior	 Stepwise multiple regression analysis Decision analyses Interviewing senior

Research Objective		Achievement of objective	How achieved
		employees.	employees
6	To assess the perception of owner/managers of MSMEs on the extent to which the proposed performance measurement framework can be used to influence the success and survival of MSMEs.	The objective was achieved and the responses of owner/managers on the proposed framework are presented Section 6.3.	Interviewing selected owner/managers

7.4 CONCLUSION

It may be deduced from the study that not all the CSFs identified in the literature review are worth measuring in order for retail MSMEs to enhance their performance. Only the extent of measurement of customer management, cost management, market scanning, employee motivation, management of regulation, innovation, and competitor management seem to be worth measuring and is likely to enhance performance and survival of retail MSMEs.

It appears measurement of non-financial performance has a higher influence on enhancing the performance of retail MSMEs than measurement of financial performance. Thus, a performance measurement tool designed to enhance the performance of MSMEs should focus more on non-financial performance than financial performance.

The measurement of performance in most retail MSMEs is inadequate. Most retail MSMEs measure financial performance and either never or rarely measure non-financial performance. Thus, failure to measure non-financial performance may be a contributing factor to the poor performance of most retail MSMEs. The basis of this conclusion is that it has been established in this study that the extent of measurement of non-financial performance is positively related to the profitability of retail MSMEs.

The extent of the measurement of one CSF is related to the extent of measurement of other CSFs. That is, those MSMEs who measure one CSF are likely to measure the other CSFs and those MSMEs who do not measure one CSF are likely not to measure the other CSFs.

There are chances that the proposed performance measurement framework may be practically useful to those retail MSMEs who may adopt it. The framework may enhance the success and survival of MSMEs as it was developed based on performance measures that have a statistically significant relationship with either the level of profit or the number of years the MSME has been in operation. The only exceptions were innovation and competitor management which were included on the basis of the recommendation of the senior employees and owner/managers interviewed. The performance measurement framework is broad based and encompasses the key performance measures for all the CSFs found to be essential

for the profitability of MSMEs. Most of the owner/managers interviewed are keen in implementing the proposed framework in their enterprises in an attempt to improve their efficiency and, therefore, viability. Hence, the proposed performance measurement framework is likely to be useful to a number of MSMEs.

7.5 RECOMMENDATIONS

The recommendations are informed by the findings in this study.

- The study recommends that MSMEs should measure performance from the stakeholder point of view incorporating both financial and non-financial performance rather than confining them to financial performance only as is currently the case with most MSMEs. It is crucial to consider the extent to which the MSME manage relationships with its various internal and external stakeholders as this will likely result in it meeting or exceeding the needs of the stakeholders. However, the MSME should pay more attention to those performance measures that are more relevant to its context as the measures in the performance measurement framework may not apply to all the MSMEs.
- MSMEs should put in place simple information management systems in order to be able to implement the proposed performance management framework. The proposed performance measurement framework would require the MSMEs to gather, record and store the performance measurement data and process it into meaningful form.
- The ministry of micro, small, and medium enterprises or other development partners who support MSMEs, should organise workshops for MSMEs so that the owner/managers of MSMEs are conscientised on the need to measure non-financial performance.

7.6 LIMITATIONS OF THE STUDY

Conclusions in this study are drawn subject to some limitations. These limitations are, however, not expected to have a significant influence on the conclusions drawn. The following are some of the limitation in this study:

 The findings and conclusions are drawn based on the perception of owner/managers regarding performance measurement practice for MSMEs in the retail sector in Zimbabwe. Therefore, there is a possibility that some owner/managers gave a biased response in order to give an impression that they measure performance even if they do not measure the performance.

- The study was cross-sectional rather than longitudinal. The responses of some owner/managers may not reflect performance measurement practices of their MSMEs over time and may have been affected by the owner/manager's predisposition of any political, economic, and social events or the owner/manager's mental position at the time of the study.
- The average net profit margin was used as a measure of performance and as a dependent variable in the regression analysis conducted to choose the CSFs which became the elements of the performance measurement framework. Although, the researcher examined the actual records where possible, to verify the reported margins, there is a possibility that the MSMEs did not prepare the records in a uniform manner. However, the profit margin was regarded as the most objective measure of performance which is not affected by the size of the MSME as it is net profit expressed as a percentage of sales.
- The data was collected from MSMEs operating in the central business district of Harare and may not be easily generalized to all the MSMEs operating in other parts of Zimbabwe or in other developing countries. However, it was not possible to collect data from a sample of MSMEs drawn from all parts of the country due to limited financial resources and time. Hence, focus on CBD of Harare was considered appropriate for this study.

7.7 RECOMMENDATIONS FOR FUTURE RESEARCH

Although the study has been conclusive, it was exploratory in nature and there is need for further research in order to authenticate or refute the findings from the study. Future studies may focus on the following:

 Testing over a long period the practical usefulness of the performance measurement framework developed in this study through a case study on a sample of MSMEs.

- Research on a large sample of retail MSMEs operating in a number of developing countries in order to develop a framework that is generalizable to any developing country without much dispute.
- A confirmative study to test the cause-effect relationships between the
 extent of measurement of the CSFs using structural equation modelling
 employing path analysis. Such an analysis may show any moderating and
 mediating variables.
- A study on MSMEs in a different sector like manufacturing, services sector, agriculture, and construction in order to establish if a similar performance measurement framework will emerge.
- A longitudinal study to develop a performance measurement framework for retail MSMEs over time. Such a study would be in the form of multiple case studies involving few MSMEs. The study may still assess performance using profit margin but the researchers would need to take part directly or indirectly, in the record keeping of each MSME. This may ensure that the keeping of financial records is uniform and the calculated average profit margin is accurate and very reliable. One way of doing this would be to design a record keeping template for use by all the MSMEs participating in the study. The longitudinal study may also give researchers the opportunity to observe the performance measurement practice of MSMEs rather than relying solely on the perceptions of owner/managers and employees of MSMEs.

7.8 SUMMARY OF CHAPTER

The chapter presented the summary, conclusion, recommendations, limitations of the study and further areas for study. It can be concluded that the study was able to identify performance measurement practices of retail MSMEs and proposed a performance measurement framework which may be useful to the MSMEs. The limitations of the study and further areas for study resulting from this study were also presented.

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APPENDIX A: INTERVIEW QUESTIONS FOR SENIOR EMPLOYEES IN THE FINANCE/ACCOUNTS SECTION

- 1. Explain how business performance is measured in your enterprise.
- 2. To what extent do you measure each of the following factors in your enterprise and how do you measure it if ever you measure it?
 - commitment of the owner,
 - business planning,
 - management of information,
 - management of revenue,
 - management of costs,
 - innovation,
 - management of customers,
 - management of suppliers,
 - management of competitors,
 - the enterprise's pool of resources,
 - conformance to regulations
 - management of sources of finance
- 3. Are there any possible relationships between the above factors?

APPENDIX B: INTERVIEW QUESTIONS FOR OWNER/MANAGERS

- 1) To what extent do the performance measures in the proposed performance measurement framework influence the performance of your MSME?
- 2) What other measures can be included in the framework to enhance the success and survival of your MSME?
- 3) Do you think this proposed performance measurement framework is applicable to retail MSMEs in Zimbabwe
- 4) Given an opportunity, would you implement this framework in your MSME?

APPENDIX C: QUESTIONNAIRE FOR OWNER/ MANAGERS

SECTION A: CHARACTERISTICS OF THE COMPANY

Select the appropriate option by marking with an X

1. Type of goods sold by the enterprise:

Clothing	
Furniture and electrical gadgets	
Grocery	
Combination of at least two of the above	

2. Number of full time employees: Enter the actual number of employees under appropriate category.

Number of employees category	Actual number
Less than 10	
10 – 50 employees	
Above 50 employees	

3. Number of years the enterprise has been in operation. Write the actual number of years under the appropriate category

Category of years	Actual years
Less than 3 years	
3 to 5 years	
6 to 8 years	
9 to 11 years	
Above 11 years	

4. Indicate the **actual** level of net profit margin for your enterprise in each of the following years under the appropriate category. See the guidance for calculating the profit margin and the key for level of profit below:

Calculation of pa	rofit margin = <u>net profit x</u> 100%
	Sales
Loss	- refers to net profit margin below 0% (negative)
Low	- refers to net profit margin between 0% - 5%
Moderate	- refers to net profit margin between 6% - 15%
High	- refers to net profit margin above 15%

YEAR	LEVE	LEVEL OF NET PROFIT MARGIN (%)										
ILAN	Loss(negative)	Low	Moderate	High								
2015												
2014												
2013												
AVERAG	E PROFIT MARGII	N:										

SECTION B: CHARACTERISTICS OF THE OWNER/MANAGER

5. What is the highest level of education of the owner/manager of the enterprise?

Secondary education	
Business related tertiary education	
Other qualification	

SECTION C: PERFORMANCE MEASUREMENT VARIABLES

On the scale provided, indicate by \mathbf{X} , the extent to which your enterpise measured the following variables in their operations in the last three years and the average level of the measures of the variable in the last three years if you measured the variable.

1= Never, 2= Rarely, 3 = Usually, 4 = Mostly, 5 = Always

					S	SCAL	E		
Variable	Measures	r	Ex neas		t of eme		Average Level of the measure of variable		
		1	2	3	4	5	high	Low	
CSF 1: OWNER/MANAGER COMMITMENT VARIABLES									
	Time spent by owner/managers in conducting the enterprise's business								
	Number of business meetings attended by owner/managers								
Involvement in the running of	Number of business meetings convened by owner/managers								
the business	Number of decisions made by the owner/manager								
	Number of new business contacts developed by the owner/manager								
	Impact of decisions made by owner/manager								

		SCALE									
Variable	Variable Measures				t of eme	nt	Average Level of the measure of variable				
		1	2	3	4	5	high	Low			
	Number of new unknown markets ventured into with the blessing of the owner/manager										
Entrepreneurial orientation (Risk taking behaviour)	Amount of resources committed by owner/manager to ventures with unknown outcomes										
	Number of new unknown products introduced into the market with the blessing of the owner/manager										
Provision of resources	Amount of resources put into business										
	Number of short courses/workshops/seminars attended by owner/manager per any given period										
Support of continuous learning	Number of employees trained per given period										
for owner/manager and	Amount of time devoted to training activities per given period										
employees	Amount of funds committed towards training programmes per given period										
	Effectiveness of training programmes										

					5	SCAL	E									
Variable	Measures	Extent of measurement										Extent of Level measurement measurement			verage el of the asure of ariable	
		1	2	3	4	5	high	Low								
	Number of employer initiated training and educational programmes attended by employees															
	Number of employees trained on employer's costs															
Employee empowerment	Number of self-directed business actions pursued by employees															
	Number of employee feedback meetings arranged by employer per given period															
	Number of key responsibilities assigned to employees by the owner/managers															
	CSF 2: EMPLOYEE COMMITMENT VARIABLES															
Employee involvement in decision-making	Number of key decisions made by employees per given period															
Job satisfaction	Level of staff morale															
	Level of performance related incentives															
	Level of staff motivation															

					S	SCAL	E	
Variable	Measures	Extent of measurement		Extent of Level of measurement variab			of the ure of	
		1	2	3	4	5	high	Low
	Willingness to have unpaid overtime							
Loyalty among staff	Level of attendance at work							
	Level of willingness to go an extra mile							
	Level of labour turnover							
Learning and professional	Number of training programmes initiated by employees							
growth	Number of training programmes attended by employees.							
	CSF 3: BUSINESS PLANNING VARIABLES		•	•				
Marketing plan	Number of marketing plan meetings/sessions held per given period							
Financial planning	Number of budget meetings/sessions held per given period							
Strategic planning	Number of strategic planning meetings/sessions held per given period							
	whether or not formal policies guide decisions							

					5	SCAL	E		
Variable	Measures	Extent of measurement					Average Level of the measure of variable		
		1	2	3	4	5	high	Low	
	consideration of future resources required								
	CSF 4: MANAGEMENT OF INFORMATION								
Gathering and reporting of information	Frequency of gathering and reporting information on the performance of different types of products in the market								
	Frequency of gathering and reporting information on the performance of products in different markets								
	Frequency of gathering and reporting market information relating to the enterprise's customers								
	Frequency of gathering and recording market information relating to the enterprise's competitors								
	Frequency of gathering and recording market information relating to the enterprise's suppliers								
	Frequency of gathering and recording information related to regulatory authorities								
	Frequency of gathering and recording information relating to the								

		S					SCALE					
Variable	Measures	n	Extent of measurement		nt of Level meas			erage I of the sure of riable				
		1	2	3	4	5	high	Low				
	enterprise's sources of finance											
Information communication technology	Level of integration of information and communication technologies in the business activities											
	CSF 5: INNOVATION VARIABLES											
Product/service innovation	Number of new products introduced into the market per given period											
	Number of new services introduced per given period											
	Number of existing services modified											
	Number of products supplied in new packaging tailor made for the enterprise (i.e branding)											
	% of turnover from new products introduced per given period											
Process innovation	Number of processes improved or enhanced during a given period											
	Number of new ways of operating introduced											
	Amount of resources committed to operational innovations											

					.E			
Variable	Measures	n			nt of eme	Average Level of the measure of variable		
		1	2	3	4	5	high	Low
	Number of new technologies used during the per given period							
Position innovation	Number of new markets developed for existing products							
	mber of new promotional campaigns per given period							
	Amount of resources invested in developing and exploiting new brands							
Focusing on new abilities	Number of new skills developed per given period							
	Number of innovation meetings held per given period to produce new ideas for products and technologies							
	Number of new managerial systems							
	Number of new ideas generated per given period							
	Amount of time devoted to developing new ideas per given period							
	Number of new ideas tested on the market. per given period							
Research and development	Level of research and development activities per given period							

					5	-E			
Variable	Measures				nt of eme		Average Level of the measure of variable		
		1	2	3	4	5	high	Low	
activities	Number of new services/processes developed or improved from research and development activities								
	Number of new markets developed from research and development activities								
	CSF 6: ENTERPRISE'S RESOURCES								
Intangible resources	Level of intangible assets per given per given period								
Tangible assets	Level of key tangible assets per given period								
Human resources	Number of key employees per given period								
Financial resources	Level of net working capital per given period								
	CSF 7: CUSTOMER MANAGEMENT VARIABLES		•	•					
Customer focus	Frequency of monitoring changes in customer needs								
	Frequency of surveys to get feedback from customers per given period								

					;	SCAL	LE		
Variable	Measures	n			nt of eme	Average Level of the measure of variable			
		1	2	3	4	5	high	Low	
Customer loyalty	Number of repeat purchases from customers per given period								
	Number of years a customer has been buying from the enterprise								
Customer retention	Number of regular customers lost per given period								
Market share	Change in sales volume of each product per given period								
Customer satisfaction	Level of suggestions from customers								
	Number of customer complaints per given period								
	Number of customers referred to the enterprise by other customers or potential customers at any given time								
Market position	Number of customers per given period								
	Number of customers per full time employee								
Customer service	Average number of after sale support services per customer per given period								
Market responsiveness	Number of changes made in response to changes in the market								

					SCAL	_E			
Variable	Measures				t of eme		Average Level of the measure of variable		
					4	5	high	Low	
	Number of market researches carried out per given period								
	CSF 8: COMPETITOR MANAGEMENT VARIABLES								
Knowledge of the enterprise's	Number of competitors per given period								
competitors	Number of new entrants per given period								
	Number of exits per given period								
	Competitors' product range per given time								
Benchmarking activities	Extent to which the enterprise takes advantage of the competitors' weaknesses								
Number of exercises to compare the enterprise's activitie those of best performing competitor enterprises									
	Number of changes effected as a result of the enterprise's benchmarking activities at any given period								
	Competitors' market share per given period								

					SCALE							
Variable	Measures				nt of eme		Average Level of the measure of variable					
			2	3	4	5	high	Low				
	Competitors' fast moving goods per given period											
	Competitors' slow moving goods per given period											
	CSF 9: SUPPLIER MANAGEMENT											
Relationship with supplier	Number of meetings held with suppliers per given period											
Access to trade credit	Percentage of credit purchases per given period											
	Level of discount received											
Delivery period	Average time taken by supplier to deliver goods after placing an order											
	CSF 10: MANAGEMENT OF REGULATORS											
Tax compliance	Number of times the enterprise is penalised by tax authorities per given period Number of times the enterprise pays tax by the due date per given period											

					5	SCAL	E	
Variable	ole Measures				it of eme	Average Level of the measure of variable		
			2	3	4	5	high	Low
Compliance to city by-laws	Number of times the enterprise is penalised by city authorities per given period							
	Number of times the enterprise pays licence fees by the due date per given period							
Compliance to industry associations	Number of industry associations the enterprise is a member of per given period							
Compliance to monitoring bodies such as standards setting board, environment management laws.	Number of times the enterprise is penalised by a monitoring board per given period							
	CSF 11: MANAGEMENT OF SOURCES OF FINANCE	•			•			
Equity	Percentage of finance contributed by owners per given period							
	Percentage of finance from retained earnings per given period							
Supplier credit	Number of times the enterprise is penalised for late payment of credit per given period							

					SCALE									
Variable	Measures				it of eme		Average Level of the measure of variable							
		1	2	3	4	5	high	Low						
	Level of early settlement discounts received from suppliers per given period													
Loans	Number of times the enterprise fail to pay interest on time per given period													
	Percentage of loan finance at any given period													
	CSF 12: COST MANAGEMENT VARIABLES													
Inventory costs	Level of costs of holding stock													
inventory costs	Level of costs of ordering													
	Level of transport costs													
	Level of salaries and wages													
Reduction of operating costs	Level of electricity costs													
	Level of cost of city council bills (water and rates)													
	Level of communication expenses (telephone, cell phones and													

					SCALE								
Variable	Measures	r			nt of eme	Average Level of the measure of variable							
		1	2	3	4	5	high	Low					
	internet)												
	Level of cost of discounts offered to customers												
Reduction of transaction costs	Level of discount forgone from suppliers												
	Level of dad debts												
	CSF 13: REVENUE MANAGEMENT VARIABLES												
Change in revenue	Percentage increase in sales volume per product per given period												
Change in revenue	Increase in selling price per given period												
	CSF 14: PROFIT												
Duefit	Increase in gross profit												
Profit	Increase in net profit												
Duefital: ilite and in a	Net profit per employee												
Profitability ratios	Net profit per customer												

	Measures	SCALE									
Variable		Extent of measurement					Average Level of the measure of variable				
		1	2	3	4	5	high	Low			
	Return on assets										
	Return on in investment					_					
	Return on capital employed										

APPENDIX D: RESULTS OF RELIABILITY TEST

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CSF1: INNOV	ATION (Cro	nbach's alp	ha = .923)	
E2_no of new services introduced	34.96	121.658	.673	.918
E3_no. of products new company packaging	35.13	123.048	.665	.918
E5_ No. of existing services modified	34.93	122.692	.591	.920
E6_no. of new ways of operating	35.12	122.401	.688	.918
E7_amt of resources committed to innovation	34.96	125.030	.546	.921
E8_no. of new technologies used	34.39	123.749	.490	.922
E9_no. of new markets for existing products	35.23	127.060	.491	.922
E10_no. of new promotional campaigns	34.65	121.677	.437	.926
E11_amt resources developing new brands	34.42	115.840	.593	.922
E12_no. of new skills developed	34.99	123.633	.614	.919
E13_no. of innovation meetings held	34.70	120.925	.699	.917
E14_no. of new managerial systems	35.50	128.879	.437	.923
E15_no. of new ideas generated	34.68	121.782	.695	.917

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
E16_amount of time devoted to new ideas	34.86	118.878	.723	.916
E17_no.of new ideas tested in market	34.84	121.911	.641	.918
E18_level of research and development activities	35.03	119.159	.773	.915
E19_no. of new services/processes from R_D	35.11	121.121	.722	.917
E20_no. of new markets from R&D	35.06	121.070	.683	.917
CSF 2: COST MANAGEMENT (C	ronbach's	alpha = .862)	
L1_level of security of inventory from pilferage	20.02	31.234	.604	.846
L3_level of reduction in inventory holding costs	19.94	32.411	.585	.848
L4_level of reduction in transport costs	19.81	32.524	.644	.844
L5_level of reduction in labour cost	19.50	33.283	.527	.852
L6_level of reduction in electricity costs	20.20	31.300	.588	.848
L7_level of reduction in council bills	20.21	31.444	.600	.846
L8_level of reduction in communication expenses	19.71	32.484	.557	.850
L9_level of reduction in discounts allowed	20.35	32.134	.623	.844
L10_level of discount forgone	20.37	32.777	.540	.851

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
L11_level of reduction in bad debts	20.64	34.146	.456	.857
CSF3: TRAINING AND DEVELO	PMENT (Cr	onbach's al	pha = .867)	
A12_amt of time devoted to training	28.10	53.485	.625	.852
A13_amt of funds committed towards training	27.89	54.031	.567	.855
A11_no. of employees trained	28.16	54.031	.570	.855
A15_no. of employer initiated training programs	28.26	51.664	.630	.851
A14_effectiveness of training programs	28.46	53.367	.557	.856
A16_no. of employees trained on employer's cost	27.92	55.525	.520	.858
A17_no. of self-directed actions by employees	28.08	53.893	.519	.858
A7_no. of new unknown markets blessed by owner/manager	28.11	54.163	.561	.856
A19_no. key responsibilities assigned to employees by owner/manager	28.49	54.155	.465	.861
A9_no. of unknown products introduced with blessing from owner/manager	28.52	53.325	.504	.859
A5_no. of business contacts by owner/manager	28.03	53.627	.525	.858
A10_no. of course attended by owner/manager	28.26	55.746	.441	.862

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted			
A4_no. of decisions made by owner /manager	28.63	53.479	.503	.859			
CSF4:COMPETITOR MANAGEMENT (Cronbach's alpha = .875)							
G5_extent of taking advantages of competitors' weaknesses	13.58	19.011	.752	.847			
G3_no. of competitor exists	13.32	20.292	.660	.857			
G4_no. of competitor product range	13.32	19.675	.642	.860			
G2_no. of new entrants	13.09	20.391	.655	.858			
G6_no. of benchmarking activities	13.68	20.422	.610	.863			
G1_no. of competitors	13.06	20.938	.591	.864			
G8_competitors' market share	13.66	21.684	.542	.869			
G7_no. of changes resulting from benchmarking	13.71	20.556	.624	.861			
CSF5: CUSTOMER MANAGEMENT (Cronbach's alpha = .884)							
H11_no. of after sale customer service	19.66	38.683	.640	.871			
H12_no. of changes in response to market changes	19.43	39.417	.563	.876			
H10_no. of customers per full time employee	19.55	37.876	.655	.870			
H6_no. of customer complains	19.69	38.256	.704	.867			
H4_% change volume of each product	20.01	40.830	.554	.877			
H7_no. of customer referred by	19.60	39.625	.606	.873			

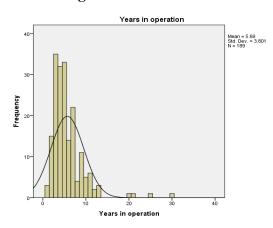
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted		
other customers						
H5_no of suggestions from customers	19.39	38.176	.598	.874		
H8_no. of years a customer purchased from enterprise	19.79	39.157	.641	.871		
H9_no. of customers	19.32	40.611	.485	.881		
H3_no. of regular customers lost	19.89	40.238	.541	.877		
H1_no. of surveys to get customer feedback	19.54	38.963	.605	.873		
CSF6: MANAGEMENT OF SOURCES OF FINANCE (Cronbach's alpha = .800)						
K3_no of times the enterprise is penalised for credit late payment	11.14	9.832	.632	.750		
K2_% of finance from retained earnings	10.28	10.192	.628	.753		
K1_% of finance contributed by owners	10.24	10.363	.545	.771		
K5_no. of times enterprise fail to pay interest on time	11.32	10.539	.584	.764		
K6_% of loan finance at any given time	10.77	10.509	.453	.793		
K4_level of discount received	11.04	9.966	.515	.780		
CSF7: MARKET SCANNING (Cronbach's alpha = .786)						
D2_information on performance of products in different markets	7.37	4.075	.550	.755		
D3_information on enterprise's	7.21	4.200	.635	.716		

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted		
customers						
D5_information on suppliers	7.36	3.859	.623	.717		
D4_information on competitors	7.84	4.010	.571	.745		
CSF8: EMPLOYEE MOTIVATION (Cronbach's alpha = .786)						
B5_willingness to have unpaid overtime	10.09	9.891	.609	.736		
B4_level of staff motivation	9.71	9.420	.637	.727		
B2_level of staff morale	9.65	9.677	.584	.741		
B10_no. of training programs attended by employees	9.85	10.680	.424	.779		
B3_level of performance related incentives	9.97	9.685	.560	.747		
B7_level of willingness to go an extra mile	9.96	10.983	.403	.783		
CSF9: MANAGEMENT OF REGULATORS (Cronbach's alpha = .827)						
J1_no. of times enterprise is not penalised by tax authorities	9.25	10.113	.703	.781		
J2_no of times enterprise pay tax by due date	9.25	10.446	.668	.789		
J6_no. of times the enterprise is not penalised by a monitoring board	10.19	14.099	.573	.811		
J3_no. of time enterprise is not penalised by city authorities	10.02	13.048	.607	.799		
J4_no. of times enterprise pay licence fees by due dates	10.05	13.131	.575	.805		
J5_no. of membership to	10.11	13.663	.587	.806		

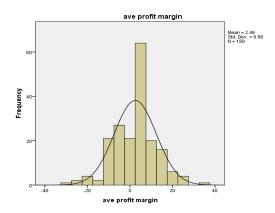
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted			
industry associations							
CSF 10 : INC	CSF 10 : INCOME (Cronbach's alpha = .663)						
N7_return on capital employed	3.43	2.024	.575	.520			
N6_Return on investment	3.27	1.677	.537	.490			
i3_level of discount received	2.82	1.340	.413	.738			

APPENDIX E: HISTOGRAMS FOR TEST OF NORMALITY

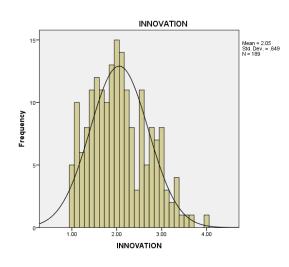
Profit margin



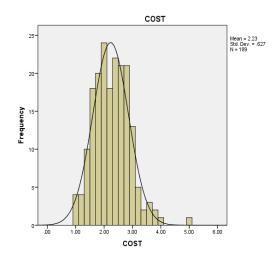
Years in operation



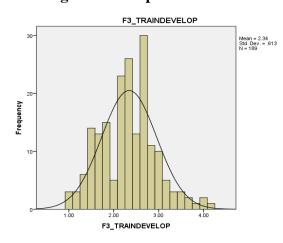
Innovation



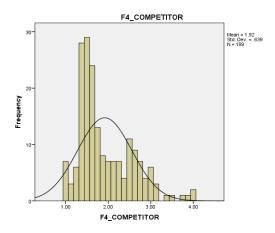
Management of costs



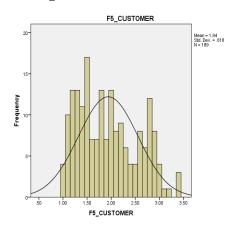
Training and development



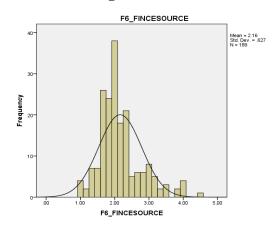
Management of competitors



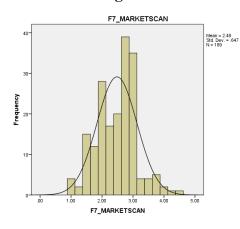
Management of customers



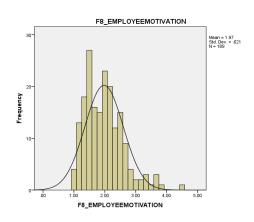
Management of sources of finance



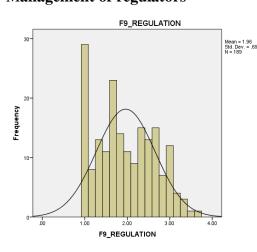
Market scanning



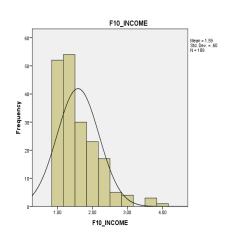
Employee motivation



Management of regulators



Management of income



APPENDIX F: CORRELATIONS MATRIX FOR MULTIPLE REGRESSION INVOLVING PROFIT MARGIN AND EXTENT OF MEASUREMENT OF CSFS

	pro	inn	cst	trd	cmp	cus	fin	ms	emm	reg	roc
Pro	-										
Inn	.504	-									
Cst	.561	.489	-								
trd	.467	.486	.395	-							
стр	.535	.465	.568	.420	-						
cus	.588	.492	.504	.352	.551	-					
fin	.400	.292	.420	.273	.425	.522	-				
ms	.532	.316	.295	.386	.316	.400	.274	-			
emm	.572	.492	.568	.433	.572	.561	.403	.418	-		
reg	.521	.452	.392	.389	.355	.427	.256	.351	.353	-	
roc	.403	.285	.466	.280	.392	.365	.389	.209	.411	.198	-

Key for the variables in the correlation matrix

Key	Description	Key	Description
pro	Average profit margin	ms	Market scanning
inn	innovation	emm	Employee motivation
cst	Management of costs	reg	Management of regulators
trd	Training and development	roc	Return on capital
cmp	Management of competitors	yrs	No. of years in operation
cus	Management of customers	emp	No. of employees
fin	Management of sources of finance		

APPENDIX G: CORRELATIONS MATRIX FOR MULTIPLE REGRESSION INVOLVING PROFIT MARGIN AND EXTENT OF MEASUREMENT OF CSFS

	yrs	inn	cst	trd	cmp	cus	fin	ms	emm	reg	roc
Yrs	-										
inn	.153	-									
cst	.282	.489	-								
trd	.123	.486	.395	-							
стр	.053	.465	.568	.420	-						
cus	.176	.492	.504	.352	.551	-					
fin	.081	.292	.420	.273	.425	.522	-				
ms	.059	.316	.295	.386	.316	.400	.274	-			
emm	.112	.492	.568	.433	.572	.561	.403	.418	-		
reg	.119	.452	.392	.389	.355	.427	.256	.351	.353	-	
roc	.126	.285	.466	.280	.392	.365	.389	.209	.411	.198	-

APPENDIX H: AUTHORITY LETTER FROM MINISTRY OF SMALL AND MEDIUM ENTERPRISE DEVELOPMENT AND COOPERATIVE DEVELOPMENT

Correspondence should be addressed to the Secretary

Telephone No's

731003/6 252529 253925 253492 250714

731879 Email. info@smecd.gov.zw Website. www.smecd.gov.zw ZIMBABWE

Ministry of Small and Medium Enterprises Development & Cooperative Development Linquenda House No. 58/60 Nelson Mandela Avenue Private Bag 7740 Causeway Harare

Ref: SMED/17/8

1st June 2015

Mr Isaac Mabhungu P Bag 1020 Bindura, Zimbabwe

Dear Mr Mabhungu

REF: REQUEST FOR INFORMATION FOR ACADEMIC PURPOSES: MR I MABHUNGU

Reference is made to your letter received on 30th April 2015 in which you requested for information for academic use in a research project.

We hereby confirm that the Ministry accepted your request and that you be given access to the required information. You are hereby directed to approach the Director Research and Policy Development and Director, Business Development on the 6th Floor and 7th Floor, respectively, Linquenda House. By copy of this letter, the Divisions have been advised accordingly.

G Bvute

for: Secretary Small and Medium Enterprise and Cooperative Development

cc Director, Research and Policy Development cc Director Business Development

APPENDIX I: ETHICAL CLEARANCE CERTIFICATE



COLLEGE OF ACCOUNTING SCIENCES RESEARCH ETHICS REVIEW COMMITTEE

Date: 8 September 2015

Ref: 2015_CAS_028
Name of applicant:
Isaac Mabhungu
Student #: 5088-869-2

Dear Mi Isaac Mabhungu.

Decision: Ethics Approval

Name: Mr Isaac Mabhungu

Private Bay 1020

Bindura

Zimbabwe

isaac.mabhungu@omail.com

071-7531-6, 7621-4

Supervisor: Prof Breggle van der Pell, (011) 652 0251, <u>vdpolihm@unisa.ac.za</u>

Proposal: A Performance Measurement Framework to Enhance the Success and Survival of MSMEs in the Refall Sector In Zimbabwe

Qualification: Ductor of Philosophy in Accounting Sciences

Thank you for the application for research ethics clearance by the College of Accounting Sciences Research Ethics Review Committee for the above mentioned research. Final approval is granted for the completion of the research.

For full approval: The application was reviewed in compliance with the Unisa Policy on Research Ethics by the College of Accounting Sciences Research Ethics Review Committee on 29 July 2015.

The proposed research may now commence with the proviso that:

- The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
- Any adverse circumstance arising in the undertaking of the research project that is refevant to the ethicality of the study, as well as changes in the methodology, should



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APPENDIX J: LETTER OF INTRODUCTION

RE: Request to participate in the research study

Dear Sir/madam

I, Isaac Mabhungu am doing research under the guidance of Prof HM van der Poll towards a PHD at the University of South Africa. I am inviting you to participate in a study entitled "A performance measurement framework to enhance the success and survival of MSMEs in the retail sector in Zimbabwe" The aim of this study is to develop a performance measurement framework to be used by MSMEs in the retail sector in Zimbabwe in order to enhance their success and survival.

I am conducting this research to:

- Identify the potential critical success factors for the performance of MSMEs based on literature review.
- Investigate the current performance measurement practices of retail
 MSMEs in Harare, Zimbabwe.
- Establish the relationships between the extents of measurement of the proposed critical success factors for MSMEs operating in Zimbabwe.
- Determine the critical success factors whose extent of measurement has an influence on the performance of retail MSMEs in Zimbabwe.
- Develop a performance measurement framework applicable to MSMEs operating in the retail sector of a developing country like Zimbabwe.
- Assess the perception of owner/managers of MSMEs on the extent to which the proposed performance measurement framework can be used to influence the success and survival of MSMEs in Zimbabwe.

Your company has been selected because it falls in the retail sector and operates in the CBD of the city of Harare which is the area of focus for the study. There are no potential risks involved in this study. Your participation in the study is voluntary. You can withdraw from the study at any point unconditionally. Please be assured that this information is sought for academic research purposes only and your responses will be strictly confidential. No individual's responses will be identified and the identity of respondents will not be published or released to anyone. The researcher will email the research findings to participants upon request.

Yours sincerely,

Isaac Mabhungu

PHD Student

(University of South Africa)

APPENDIX K: CONSENT TO PARTICIPATE IN THIS STUDY

I, (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.
I have read (or had explained to me) and understood the study as explained in the information sheet.
I have had sufficient opportunity to ask questions and am prepared to participate in the study.
I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).
I am aware that the findings of this study will be anonymously processed into a research report, journal publications and/or conference proceedings.
I agree to the recording of the interview.
I have received a signed copy of the informed consent agreement.
Participant name & surname (please print)
Participant signatureDate
Researcher's name & surname(please print)
Researcher's signatureDate
Witness name & surname (please print)
Witness's signatureDate

APPENDIX L: PARTICIPANT INFORMATION SHEET

A Performance Measurement Framework to enhance the Business Performance and Survival of MSMEs in the Retail Sector in Zimbabwe

Dear Prospective Participant

My name is Isaac Mabhungu and I am doing a PHD research at the University of South Africa under the guidance of Professor van der Poll. I am inviting you to participate in a study entitled "A performance measurement framework to enhance the success and survival of MSMEs in the retail sector in Zimbabwe"

WHAT IS THE AIM/PURPOSE OF THE STUDY?

The aim of this study is to develop a performance measurement framework to be used by MSMEs in the retail sector in Zimbabwe in order to enhance their success and survival.

I am conducting this research to:

- Identify the potential critical success factors for the performance of MSMEs based on literature review.
- Investigate the current performance measurement practices of retail
 MSMEs in Harare, Zimbabwe.
- Establish the relationships between the extents of measurement of the proposed critical success factors for MSMEs operating in Zimbabwe.
- Determine the critical success factors whose extent of measurement has an influence on the performance of retail MSMEs in Zimbabwe.
- Develop a performance measurement framework applicable to MSMEs operating in the retail sector of a developing country like Zimbabwe.
- Assess the perception of owner/managers of MSMEs on the extent to which the proposed performance measurement framework can be used to influence the success and survival of MSMEs in Zimbabwe.

WHY ARE YOU BEING INVITED TO PARTICIPATE?

You are being invited as either the owner/manager of the MSME or the most senior employee in the accounts/finance section of the MSME because you are likely to be more knowledgeable on the activities of the enterprise, its objectives, vision and

mission. The development and implementation of a performance measurement framework may depend on your commitment.

WHAT IS THE NATURE OF YOUR PARTICIPATION IN THIS STUDY /WHAT DOES THE RESEARCH INVOLVE?

The owner/managers will complete the questionnaires and the most senior employees in the finance/accounts department of the MSMEs will respond to interview questions. The study involves questionnaires and semi-structured interviews. The questions to be asked will involve an investigation of the performance measurement practices implemented by MSMEs as well as the critical success factors for the retail MSMEs. The completion of the questionnaire will take at most forty minutes and the interviews will take at most one hour

CAN I WITHDRAW FROM THIS STUDY?

Participation in this study is voluntary and there will be no penalty or loss of benefit for non-participation. Being in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. Although you are free to withdraw at any time and without giving a reason, it will not be possible to withdraw once the anonymous questionnaire has been collected from you.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

It is hoped that the performance measurement framework to be developed in this study will improve the performance and success of MSMEs in the retail sector in Zimbabwe. Thus, the performance of your business may improve if you use the performance measurement framework to be developed in this study.

WHAT IS THE ANTICIPATED INCONVENIENCE OF TAKING PART IN THIS STUDY?

This study will take part of your time, especially those who will be interviewed. This is because the interview will take place during the time you are supposed to be carrying out your enterprise's business. However, to minimise the inconvenience, you will decide on the time and place where the interview will be carried out.

For the owner/managers completing the questionnaires, there will be minimum inconvenience as the questionnaire will be completed during free and convenient

time. The owner/ managers will be given two weeks in which to complete the questionnaires and the questionnaire will take at most forty minutes to complete.

The other possible inconvenience is that the researcher will invade your privacy by gathering information on your company. However, the information collected on your enterprise will be kept confidential and your identity will not be disclosed to anyone.

WILL WHAT I SAY BE KEPT CONFIDENTIAL?

Your name will not be recorded anywhere and no one will be able to connect you to the answers you give. Your answers will be given a fictitious code number or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

Your answers may be reviewed by people responsible for making sure that research is done properly, including a transcriber, external coder, and members of the Research Ethics Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Your anonymous data will be used to write a research report and may be presented at conferences. A report of the study will be submitted for publication, but individual participants will not be identifiable in such a report.

HOW WILL INFORMATION BE STORED AND ULTIMATELY DESTROYED?

Hard copies of your answers will be stored by the researcher for a period of 3 years in a locked cupboard/filing cabinet at the researcher's place of residence for future research or academic purposes. Electronic information will be protected by a password and also stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. The hard copies will be destroyed by burning them and the electronic copies will simply be deleted from the computer.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

You will not receive any payment for taking part in this research.

HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This study has received written approval from the Research Ethics Committee of the

College of Economic and Management Sciences, Unisa. A copy of the approval

letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS?

If you would like to be informed of the final research findings, please contact Isaac

Mabhungu on 0773 912 912 or isaac.mabhungu@gmail.com. The findings are

accessible for a period of five years from the completion of the study.

Should you require any further information or want to contact the researcher about

any aspect of this study, please contact Isaac Mabhungu on 0773 912 912 and

isaac.mabhungu@gmail.com.

Thank you for taking time to read this information sheet and for participating in this

study.

Thank you.

Isaac Mabhungu.

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APPENDIX M: RELIABILITY TEST: PILOT STUDY

	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
OWNER/MANAGER COMMITEMENT CSF (Cro	nbach's alpha =	= 0.951)
Time spent by owner/manager running business	.742	.948
Number of business meetings attended by owner managers	.581	.950
Number of meetings convened by owner/managers	.688	.948
Number of decisions made by owner /managers	.727	.948
Number of business contacts by owner/managers	.758	.947
Impact of decisions made by owner/managers	.686	.948
Number of new unknown markets blessed by owner/managers	.671	.949
Amount of resources by owner/managers to ventures with unknown outcomes	.482	.952
Number of unknown products introduced with blessing from owner/managers	.774	.947
Amount of resources put into business	.298	.954
Number of course attended by owner/managers	.793	.947
Number of employees trained	.785	.947
Amount of time devoted to training	.877	.946
Amount of funds committed towards training	.851	.946
Effectiveness of training programmes	.747	.948
Number of employer initiated training programmes	.837	.946
Number of employees trained on employer's cost	.618	.949
Number of self-directed actions by employees	.706	.948
Number of feedback meetings arranged by employer	.660	.949

Number of key responsibilities assigned to employees by owner/manager	.533	.950
Employee commitment (Cronbach's	Alpha = 0.914)	
Employee commitment		
Number of key decisions by employees	.790	.901
Level of staff morale	.793	.900
Level of performance related incentives	.571	.911
Level of staff motivation	.755	.902
Willingness to have unpaid overtime	.621	.908
Level of absenteeism from work	.487	.917
Level of willingness to go an extra mile	.452	.915
Level of labour turnover	.538	.913
Number of short courses attended by employees	.924	.891
Number of training programmes initiated by employees	.638	.907
Number of training programmes attended by employees	.847	.896
BUSSINESS PLANNING (Cronbach's	alpha = 0.697)	
Number of market planning meetings	.720	.534
Number of budget meetings held	.536	.622
Number of strategic planning meeting	.586	.603
Number of formal policies guiding decisions	.320	.692
Number of assets acquired from advanced planning	.325	.691
Amount of resources required in future	.170	.740
MANAGEMENT OF INFORMATION (Cronba	ach's alpha = 0.9	914)
Information on performance of different products in market	.829	.895

Information on performance of products in different markets	.887	.889
Information on enterprise's customers	.728	.905
Information on competitors	.819	.896
Information on suppliers	.638	.911
Information on regulatory authorities	.666	.909
Information on sources of finance	.606	.916
Level of ICT integration	.622	.912
INNOVATION (Cronbach's Alpha	a = 0.974)	
Number of new products in market	.620	.975
Number of new services introduced	.875	.972
Number of existing services modified	.866	.972
Number of products new company packaging	.824	.973
Percentage of new product turnover	.889	.972
Number of processes improved	.731	.974
Number of new ways of operating	.928	.972
Amount of resources committed to innovation	.724	.974
Number of new technologies used	.604	.974
Number of new markets for existing products	.762	.973
Number of new promotional campaigns	.747	.973
Amount resources used to develop new brands	.831	.973
Number of new skills developed	.774	.973
Number of innovation meetings held	.920	.972
Number of new managerial systems	.350	.976
Number of new ideas generated	.811	.973
Amount of time devoted to new ideas	.884	.972

Number of new ideas tested in market	.837	.973			
Level of research and development activities	.883	.972			
Number of new services/processes from Research and Development	.872	.972			
Number of new markets from Research and Development	.834	.973			
RESOURCES Enterprise resources (Cronba	ach's Alpha = 0.	816)			
Level of intangible resources	.372	.867			
Level of tangible assets	.862	.655			
Number of key employees	.748	.712			
Level of working capital	.614	.788			
CUSTOMER (Cronbach's Alpha	= 0.925)				
Frequency of monitoring customer needs	.559	.923			
Number of surveys to get customer feedback	.721	.917			
Number of customer repeat purchases	.546	.923			
Number of regular customers lost	.542	.923			
% change volume of each product	.810	.914			
Number of suggestions from customers	.821	.914			
Number of customer complains	.815	.913			
Number of customer referred by other customers	.802	.914			
Number of years a customer purchased from enterprise	.701	.918			
Number of customers	.488	.925			
Number of customers per full time employee	.747	.916			
Number of after sale customer service	.468	.925			
Number of changes in response to market changes	.653	.920			
COMPETITOR CSF (Cronbach's Alpha = 0.951)					

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Number of competitors	.777	.947
Number of new entrants	.829	.944
Number of competitor exists	.777	.946
Level of competitor product range	.816	.945
Extent of taking advantages of competitors' weaknesses	.909	.942
Number of benchmarking activities	.780	.947
Number of changes resulting from benchmarking	.829	.944
Level of competitors' market share	.740	.948
Level of competitors' fast moving goods	.744	.949
Level of competitors' slow moving goods	.775	.947
SUPPLIER MANAGEMENT CSF (Cronbac	ch's Alpha = 0.83	39)
Number of meetings held with suppliers	.766	.769
Percentage of credit purchases	.416	.891
Average time of delivery by supplier	.773	.750
Level of discount received from suppliers	.804	.738
MANAGEMENT OF REGULATORS CSF (Cror	nbach's Alpha =	0.912)
Number of times the enterprise is penalised by tax authorities	.674	.908
Number of times the enterprise pays tax by the due date	.920	.874
Number of times the enterprise is penalised by city authorities	.723	.901
Number of times the enterprise pays licence fees by the due dates	.923	.871
Number of membership to industry associations	.651	.911
Number of times the enterprise is penalised by a monitoring board	.676	.909

MANAGEMENT OF SOURCES OF FINANCE CSF (Cronbach's Alpha = 0.790)					
% of finance contributed by owners	.506	.765			
% of finance from retained earnings	.715	.726			
Number of times the enterprise is penalised for credit late payment	.418	.780			
Level of discount received	.660	.736			
% of inventory acquired on credit	.311	.806			
Number of times enterprise fail to pay interest on time	.496	.768			
% of loan finance at any given time	.577	.752			
MANAGEMENT OF COSTS CSF (Cronbac	ch's Alpha = 0.92	25)			
% of inventory pilferage	.649	.922			
% of inventory which goes bad	.551	.924			
Level of inventory holding costs	.884	.910			
Level of ordering costs	.862	.911			
Level of transport costs	.689	.918			
Level of salaries and wages	.535	.924			
Level of electricity costs	.691	.920			
Level of council bills	.622	.921			
Level of communication expenses	.784	.914			
Level of cost of discounts	.724	.917			
Level of discount forgone	.796	.913			
Level of bad debts	.561	.924			
MANAGEMENT OF REVENUE CSF Cronbach's Alpha = 0.755)					
Number of products with an increase in product sales volume	.792	.541			
Number of products with an increase in selling price	.781	.557			

Number of products with a decrease in selling price	.755	.628			
Number of products with a decrease in sales volume	.090	.929			
MANAGEMENT OF PROFIT CSF (Cronbach's Alpha = 0.906)					
Increase in gross profit	.701	.898			
Increase in net profit	.595	.907			
Net profit per employee	.757	.889			
Net profit per customer	.793	.884			
Return On Assets	.821	.880			
Return on investment	.799	.883			
Return on capital employed	.662	.899			