 J Economics, 5(3): 247-257 (2014)

Non-Financial Performance Measures in Small Medium Enterprises' Supply Chain Management

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KEYWORDS Manufacturers. South Africa. Production. Traditional Performance Measures

ABSTRACT Performance measures in the supply chain have become one of the vital factors in enhancing the growth and profitability of small medium enterprises (SMEs), however, with focus more on financial indicators than non-financial ones. This paper therefore attempts to redress the balance by discussing the extent to which SMEs make use of non-financial performance measures and argues for their importance. It is based on research within a positivistic paradigm, with the use of questionnaires administered to purposively selected SMEs in manufacturing around Cape Town, South Africa. The data was analysed to generate descriptive results through SPSS. The major findings indicate that SMEs do consider and recognise the significance of non-financial measures and to some extent incorporate them in their supply chain management (SCM). However these measures are not formally implemented.

INTRODUCTION

Performance measures should clearly define and support the company's strategic goals, enhance communication across the supply chain and not drift from the strategic goals in order to attain the desired results (Handfield et al. 2009). In order to monitor supply chain performance persistently, metrics are used from five categories, namely, cost, time, quality, flexibility and innovativeness (Habidin and Yusof 2013; Thome et al. 2014). Managers of small medium enterprises (SME) involved in the supply chain activities take actions on performance measurement results to ascertain competitiveness. It may be demanding and costly for them to implement the process, therefore it is critical to maximise quality and customer satisfaction whilst reducing wastage of scarce resources (Hudson et al. 2001; Vanichchinchai and Igel 2009, 2011). SMEs should respond abruptly to changing markets. According to Kurien and Qureshi (2011) for any business that operates in SCM it is necessary to identify the required performance measures from different perspectives and that should form an integral part of the firm's business strategic goals. Many supply chain entities, particularly SMEs, have recently noticed the significance of SCM in their daily operations, although they lack the skills and knowledge of how well effective performance measures and metrics may be developed to fully integrate it (Gunasekaran et al. 2001). Lack of skills has a negative impact as a result of lack of proper performance management approach towards SCM and evident differentiation between strategic, tactical and operational metrics in SCM. Bent (2014) postulate that for SCM to be effective, performance measurement objectives must take cognisance of all four perspective of the balanced scorecard (BSC) and identify performance indicators from it (Bhagwat and Sharma 2007).

SCM represents a set of approaches used to effectively integrate suppliers, manufacturers, warehouses, and stores so that merchandise is manufactured and delivered in the right quantities, to the right places and at the right time, resulting in committed service in order to reduce system-wide costs while fulfilling service level requirements (Brewer and Speh 2000; Burt et al. 2003; Simchi-Levi et al. 2003; Hugos 2006; Branch 2009). According to Burt, Petcavage and Pinkerton (2010) SCM is a "fraction of the organisation's value chain, which is responsible for supplying the production and transformation process."

There must be clear tangent plane between internal integration and the customer (Lee et al. 2007), thus encouraging business information

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sharing amongst parties involved. Oh et al. (2012) write that "customer linkage" is about sharing product information with the clients, acceptance of their orders, engaging with them to manage demands, having an order placing system, communicating the status of the customer orders as well as product delivery phase. This promotes the ability to communicate delivery of products to customers at the right time, place, quality and quantity. "Supplier linkage" in turn deals with strategic communication with suppliers and should include them in new product development, production planning and inventory management, in order to maintain rapid response order processing, put in place a supplier network that guarantees delivery reliability, and share information with suppliers. Koh et al. (2007) assert that the use of a few suppliers enables an effective communication and supplier relationship that promotes the growth of supply chain management performance .There should, however, be a close relationship with customers in order to ascertain the trends of customer demand changes, thus enabling flexible and effective SCM.

Recently, some companies have acknowledged the significance of SCM, although they still lack the skills and knowledge of how well effective performance measures and performance indicators can be developed to attain a thorough integrated supply chain (Gunasekaran et al. 2001; Ageron et al. 2012; Urif-Uz-Zaman 2014). Companies employ a significant number of performance measures based on employees' and consultants' viewpoints, thereby not taking into account indicators, which are crucial for successful performance measures (Bhagwat and Sharma 2007; Thakkar et al. 2009). The metrics should be easy to comprehend, while information about it should be easily gathered and analysed in the most economical way (Bhagwat and Sharma 2007).

From the above-mentioned, it is evident that authors and researchers have emphasized and recommended the implementation of performance measures from a balanced point of view; that is incorporating both the financial and the non-financial aspects. The underlying assumption in this paper is that perception of importance may determine usage. Hence, the aim of this paper is to present on how SMEs in the manufacturing sector perceive and use non-financial performance measures in their supply chain operations. The remaining part of this paper is divided into sections on the literature review, research methodology, presentation of the result and a discussion thereof, a conclusion, recommendations and suggestions for further studies.

Literature Review

Theoretical Bases

A theoretical framework is a well-developed explanation of events that helps the researchers to locate their studies and to signal the origin of their proposed research (Vithal and Jansen 2010). According to Argyrous (2011) theories are ways in which the world may be interpreted and reconciled to ourselves. Here a theoretical framework is necessary for the authors to locate the underlying study and apply the theory to performance measures in SCM of SMEs in the manufacturing sector towards their growth and development (Maree and Van der Westhuizen 2009). To this effect, principal agency theory (PAT) and network theory (NT) are used to locate and expound the study results of this paper. PAT, as described by Eisenhardt in 1989, applies when the two parties – the principal and the agent - come together to deliver the objectives of the principal. In this situation the principal delegates responsibilities to the agent so that specific predetermined objectives are achieved. Problems may, however, arise as a result of conflicting goals of the principal and the agent (Zsidisin and Ellram 2003; Halldorsson et al. 2007; Ketchen et al. 2007). In an organisation, the difference between an owner and a manager; as well as their objectives may be explained with PAT. Manufacturing entities have specific objectives as set out by the management of such entities; it is important to evaluate the perceptions of owners and managers to ensure that there are no conflicting objectives. NT is used to explain the relations between interdependent organisations (Thorelli 1986). It is essential for SMEs to build on good relationships with external parties in their SCM; such as the buyer-supplier relationship, which may lead to speedy delivery, better quality of material supplied, shorter lead times in manufacturing and eventually customer satisfaction (Shook et al. 2009). The interrelatedness among independent organisations (external parties) and the effect of their

relationship on their individual operations are well explained with the application of NT.

Small Medium Enterprises

Small businesses are defined differently from one country to another. There is no consensus regarding the definition of SMEs, thus playing a critical role in the country's economic development and corresponding conditions that govern the state in question (Naimy 2004; Effah and Light 2009). According to Naimy (2004) certain measures are used to define SMEs, such as number of employees, asset value, sales turnover, capital invested, and managerial characteristics. The overall perception from the aforementioned definitions of SMEs is that they do not have more than 500 employees, although the majority of countries define SMEs as having up to 250 employees, and others not more than 100 (Thong 2001; Nichter and Goldmark 2009). They have a low skills base and employ incompetent people, with the owners having little or no education and limited resources, which leads to failure of expansion or growth in competitive environments, and deficiency in technological implementation.

SMEs are still confronted with a huge failure rate (Jones 2009; Fatoki 2014) giving rise to the question as to why this failure rate persists even today? Lyons and Mattare (2011) postulate that SMEs do not engage in formal training but rather their employees are limited to informal training that includes orientation to the business, tasks, and hands-on training in relevant job skills and other forms of guidance only when needed. However, when SMEs are less developed in knowledge and skills, the small businesses will continue to be more disadvantaged than larger corporations, due to their greater involvement in formal training and workshops for their staff members. This eventually leads to effectiveness and efficiency of processes and activities undertaken (Lyons and Mattare 2011). Suggestions for developments to improve performance in SMEs are that trainees, be they employees or managers, are to be involved directly in the process of strategy formulation, design, application of training activities and material, innovation and technology (Ahmad and Seet 2009; Lyons and Mattare 2011). Although SMEs are more attentive to the needs of their customers, irrespective of country, they all face common problems which significantly impact on their performance, survival and success (Ahmad and Seet 2009; Bustinza et al. 2013). Major factors which negatively impact on the development and growth of SMEs are primarily lack of resources, competitiveness and major changes in customers' tastes and needs (Ahmad and Seet 2009). Furthermore, SMEs in South Africa are still confronted with the difficulty of redressing historical imbalances and increasing the level of black economic participation in the development and growth of small businesses (Luiz 2002). Issues confronting SMEs may be mitigated by engaging large entities to come into partnerships with SMEs (Luiz 2002) (NT). Conventionally, SMEs have to face challenges in order to survive with their limited resources and with little support from governments, which worsen the situation in uncertain economic periods (Casals 2011). Globalisation of markets escalates competition from international markets and so coerces SMEs to source alternative ways of survival, such as flexibility and innovativeness. Contrary to Luiz (2002) who proposes engagement of large entity to help SMEs development, Casals (2011) suggests adoption of co-operative approaches among small companies with the view that it supplements their weaknesses and groups similar approaches. The co- operative approach is in line with the NT, which aims to strengthen the relationships among interdependent organisations.

Supply Chain Management in SMEs

Supply chain management is vital in SMEs manufacturing towards success and effective operation, however, there are persistent problems, risks and uncertainties regarding its operation. Market turbulence occurs with customer demand, taste, quality and type of product (Trkman and McCormack 2009), as markets, supply chain and market share may change significantly, making it difficult for companies to forecast customer preference in tastes or demand. Technological turbulence occurs as technology changes over time, arising from changes in the products or services and their rates of obsolescence (Chatterjee 2004). Other changes are discrete and difficult to predict which may lead to difficulties in measurement, including possible transport disruption such as accidents and transportation union strikes, political events and natural disasters (Trkman and McCormack 2009).

There are other factors that impede SMEs from asserting a contribution towards effective and efficient implementation of SCM. These challenges emanate from the operating behavioural pattern of SMEs (Hamisi 2011) and include *high inventory levels*, in which SMEs are victims of high inventory levels that lead to higher holding costs (Hendricks and Singhal 2005), and *setting customer service levels*, in which SMEs are often faced with lack of operational efficiency. They aim for specific customer service level but often fail to translate their mission into an improved performance level (Hamisi 2011) which results in unsatisfied customer demands. *High transportation and logistics costs* mean SMEs encounter delivery problems, so customers do not receive their goods and services on time (Hamisi 2011). *Complexities associated with global sourcing*, due to scarcity of resources, mean SMEs lack the potential to source globally for the best possible source at the lowest cost (Hamisi 2011). SMEs are unable to attract markets and therefore large enterprises have the opportunity to lever national as well as international markets because of their competitive advantage (Hamisi 2011). With *Outdated and/or non-integrated technologies*, SMEs are faced with difficulty in adopting new technology and so lose their competitiveness due to poor quality of goods and services provided (Hamisi 2011). The cost of new technology is an obstruction towards the successful implementation of supply chain management. According to Hamisi (2011 citing Mbamba 2009), technology is a driving force in achieving the set targeted objective, although some difficulties are encountered by SMEs that partake in multiple supply chain investment. Integrated supply chain is viewed as one of the best practices in their business processes. These entities however would require smooth communication in order to maximise their processes. Integration of supply chain processes is essential for SMEs and needs to be addressed, with the focus of meeting the customers' needs, suppliers' effectiveness and other variables such as industry and market penetration (Vanichchinchai and Igel 2009, 2011).

Managers and directors involved in the performance measurement process should take cognisance of the significance performance measures play in a supply chain management system. It is of importance to understand the SCM performance measures implemented and utilise performance measures effectively (Gunasekaran and Kobu 2007; Wouters 2009; Akyuz and Erkan 2010) as it enables the smooth operation, review and redesign of measures when necessary. Implementation of performance measures should be perceived as a critical step to a successful manufacturing business that requires a maximum functioning capacity of automated systems and thus frequent reporting mechanisms (Bourne et al. 2000). However, individual performance may be automated for easy referral and updates on the development. PAT advocates striving towards a common goal among members of SCM, therefore, to enable effective utilisation of performance measures in supply chain, communication is imperative to managers and directors who are obliged to measure performance and work hand in glove. Forums are set up in which measures are reviewed, discussed and agreed upon by all parties. Again, a supply chain led by a team of people who share the same vision and who are willing to cooperate and listen can attain set strategic objectives.

Performance Measures of SCM

Performance measurement systems should be well monitored to enhance the supply chain. In view of the NT, all parties involved in the chain must work towards a common goal and collaborate both internally and externally to meet the needs of the customers, and to attain competitiveness in the market. Kleverlaan (2008) notes that improved performance is not achieved through an automated machine but rather those involved must work hard with the aim of cherishing the benefits at the end. It is imperative for businesses to monitor their organisational performance in conjunction with their SCM and align the objectives to the organisational strategy (Fernandes et al. 2006).

Performance on supply chain should be evaluated at strategic, tactical and operational level. Strategic level measures include lead time against industry norm, quality level, cost saving initiatives, and supplier pricing against the market (Gunasekaran et al. 2001). Tactical measures, on the one hand, include purchase order cycle time, cash flow, quality assurance and flexible capacity, while operational level measures include technical representation, adhering to developed schedule, complaints avoidance capability, and achievement of defect free deliveries. This sec-

tion maps the PAT of the company as measures are cascaded from the strategic level (principal) down to the middle and operational level (agent) with the aim of achieving the organisational objectives. Understanding of the strategic objectives enables those involved to actively engage towards the desired goal, therefore, flexible communication is of the essence throughout the value chain. The evaluation of supply chain management performance is in accordance with s*trategic level measures***,** t*actical level measures* and o*perational level measures* (Gunasekaran et al. 2001; Bhagwat and Sharma 2007, 2009; Cai et al. 2009). The following section is the research methodology.

METHODOLOGY

This paper is based on empirical research that followed a positivistic research paradigm, which required extensive interaction with people towards the attainment of data necessary to answer questions and the research problem. It focuses primarily on capturing the truth which already exists (Easterby-Smith et al. 2008, 2010), finding the truth through empirical research means in order to describe, explain and predict the phenomenon being studied (Henning et al. 2004). Purposive sampling was therefore suitable for the study. Due to the difficulty encountered in consultation with the officials from the Department of Trade and Industry (DTI) to access the Western Cape manufacturing data base, a survey on a door-to-door basis in manufacturing areas in Cape Town was inevitable. The inclusion criteria for selection as sample were that: 1.) the enterprise operates as a manufacturing concern; and 2.) the company falls within the threshold of the definition of SMEs. Data gathered from a total of 30 questionnaires were suitable and used for data analysis.

Data Analysis

Data was analysed and descriptive statistics generated using statistical software for social sciences (SPSS), presented from different variables in the questionnaire measuring non-financial performance measures in SMEs' SCM. For each category of variables the frequencies and percentage output from a total of the respondents were determined. In some instances, there were no answers provided, so they were treated as 'missing' values. Descriptive statistics are presented using frequency distribution tables, pie and bar charts (Somekh and Lewin 2005).

RESULTS AND DISCUSSION

In this section, the results of this study, in accordance with the study objectives are presented. *To ascertain whether SMEs recognise the vital role, which non-financial performance measures play in supply chain management.*

The research question that leads to this objective was: *How useful are the non-financial performance measures in effective decision making for SMEs in supply chain management?*

The first question under this objective is an umbrella for all non-financial measures and reads as follows:

How often do you evaluate non-financial performance measures in your SCM implemented?

Majority of the respondents evaluated non-financial performance measures on a monthly and weekly basis, with 31% of the respondents evaluated for performance on a weekly basis, 48.3% on a monthly basis, 6.8% divided equally between quarterly and six monthly, and 13.8% annually.

Customer Measures

Customer measures were analysed based on the three performance indicators, namely customer satisfaction, customer retention and customer response time. The following questions were posed:

- *Which performance indicators are regarded as the critical success factors of customer measures in your SCM?*
- *Are your customers happy with the goods sold?*
- *Do you respond quickly to customer queries?*
- *Have you retained all your customers in the past five years?*

Customer satisfaction (see Table 1) received the highest figure of 90% from respondents as a critical measure when compared to customer retention at 53.3%. This is supported by researchers who emphasise that for a firm to stay competitive its customers must take the first priority at service level which should target shorter lead times and attain the highest customer satisfac-

Table 1: Results on customer measures

Q: Are your customers happy with the goods sold?

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Yes	29	96.7	96.7	96.7
	No	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Q: Do you respond quickly to customer queries?

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Yes	29	96.7	96.7	96.7
	No	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Q: Have you retained all your customers for the past five years?

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Yes	14	46.7	46.7	46.7
	No	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

Source: Fieldworks

tion rate (Hudson et al. 2001; Vanichchinchai and Igel 2011; Qrunfleh and Tarafdar 2014). Some SMEs managers reported that their businesses were evaluated by customers on a quarterly basis, for product delivery, product flexibility and defect-free deliveries; hence customer satisfaction was more critical to them. Although SMEs do not consider customer retention and response time as key when compared with customer satisfaction, their understanding may be that when customers are satisfied they are bound to stay. It is therefore imperative to check with their happiness rather than retaining them first. A total of 96.7% of the respondents indicated that their customers were happy with products sold to them and customers' queries were attended to on a timely basis. However, only 46.7% had retained their customers for the previous five years. The results under this measure of customer imply that SMEs understand the significance role the customer plays in the value chain (Ahmad and Seet 2009; Bustinza et al. 2013). SCM encompasses all processes and parties involved engaged from the point of supplier to end customer in the chain, which is the boundary for this study. Therefore, SCM would be meaningless without the customers because all the activities and processes engaged in production and distribution are meant to achieve their demands.

Internal Efficiency, Quality and Time Measures

This section analyses the results based on measures of internal efficiency, quality and time, such as manufacturing lead time, defect-free deliveries, on-time deliveries, product quality and total supply chain cycle time (see Table 2). The respondents were asked the following questions in form of a four-point Likert scale ranging from 1= strongly disagree to 4=strongly agree:

Table 2: Results on internal efficiency, quality and time measures

Q: Deliveries are always on time when they arrive at the customers

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Disagree	3	10.0	10.0	10.0
	Agree	23	76.7	76.7	86.7
	Strongly Agree	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Q: Good quality of products is delivered to customers

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Agree	14	46.7	48.3	48.3
	Strongly Agree	15	50.0	51.7	100.0
	Total	29	96.7	100.0	
Missing	System	1	3.3		
	Total	30	100.0		

Source: Fieldwork

- *Manufacturing lead time takes longer than the budgeted period.*
- *Deliveries are always on time when they arrive at the customer.*

- *Suppliers are reliable.*
- *Good quality of products is delivered to customers.*
- *Which are the critical success factors of internal efficiency, quality and time measures in your SCM implemented?*

Product quality is regarded as the most critical measure by SMEs respondents. It received 73.3% from the respondents, while manufacturing lead time received 63.3%, and on-time deliveries 56.7%, followed by 50% of product reliability. It is critical to monitor SCM performance by maximising metrics such as quality, time and cost to ensure customer satisfaction (Hudson et al. 2001; Shepherd and Gunter 2006; Thome et al. 2014; Urif-Uz-Zaman and Ahsan 2014). These results fit the TCA, where total cost engaged in SCM are considered with the focus on achieving economical cost and ensuring customer satisfaction (Ketchen et al. 2007). Of concern is a high disagreement of significance to the supply chain cycle time of 70% as its effectiveness may not be justified without this measure. The entire SCM is ought to be monitored, controlled and evaluated so as to help facilitate the smooth flow of information and activities engaged to meet the desired objectives of the organisation. The inventory-cost range and material efficiency obtained a lower 20% and 16.7%, which indicates that SMEs do not have a thorough understanding of inventory management, thus inventory is not well controlled, monitored or properly evaluated.

Innovation and Growth Measures

In this section, analysis pertaining to the significant role the innovation and growth measures play in SCM is presented. Performance indicators /critical success factors of this measure encompass new product launches, new product development and the use of new technology. This aspect of the questionnaire gathered information by asking the respondents the following questions:

- *Which are the critical success factors of innovation and growth measures in your SCM implemented?*
- *How often do you launch new products?*
- *Use of new technology is implemented when changes come.*

Measures of innovation and growth are viewed differently by the researchers. Although these metrics scored less than average in their level of significance, product development being the highest at 43.3% and the lowest 20% of new product launches, the researchers' view is that it is as a result of diversity in the nature of commodities manufactured and sold, despite them all being manufacturing concerns. Some businesses would not need to focus on product launches if they do not specialise in seasonal products. Product development and product launches may be of significance to entities that manufacture a variety of products, including seasonal ones, which require intensive creativity and customer reliance due to competition, and may exist for some or a particular commodity. New technology is inevitable in the 21st century and therefore SMEs must adapt to changes in order to retain and attract new markets. A promising 80% (60%= agree and 20%= strongly agree) of the respondents agreed that technology was implemented when necessary in their entities while 20% (3.3%= strongly disagree and 16.7%= disagree) of the respondents did not make use of new technology.

Descriptive Results on SCM in SMEs

This section presents descriptive results affecting the day-to-day management of supply chain in SMEs' manufacturing and ultimately addresses objective two of this study – that it is imperative to effectively manage and monitor SCM processes from across the entire value chain. The questions used to provide analysis in this section is in the form of a four-point Likert scale (1=strongly disagree to 4= strongly agree). The respondents were asked the following questions:

- *The performance metrics used in my supply chain are clear and easy to understand.*
- *I have a good relationship with parties involved in the supply chain.*
- *There is good communication amongst parties involved in the measurement system.*
- *Feedback on performance measures is given on regular basis to relevant parties.*
- *Business is sustainable.*

Table 3 illustrates responses to questions around relationship within the supply chain; all the respondents claimed to have a good relationship with their suppliers. The analogy from this result is that good relationship may lead to

Table 3: Results on SCM issues

Q: I have a good relationship with parties involved in the supply chain

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Agree	19	63.3	63.3	63.3
	Strongly Agree	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

Q: There is good communication amongst parties involved in the measurement system

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Disagree	2	6.7	6.7	6.7
	Agree	15	50.0	50.0	56.7
	Strongly Agree	13	43.3	43.3	100.0
	Total	30	100.0	100.0	

Q: Feedback on performance measures is given on regular basis to relevant parties

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Disagree	5	16.7	16.7	16.7
	Agree	13	43.3	43.3	60.0
	Strongly Agree	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Q: The business is sustainable

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Agree	15	50.0	53.6	53.6
	Strongly Agree	13	43.3	46.4	100.0
	Total	28	93.3	100.0	
Missing	System	2	6.7		
Total	30	100.0			

Source: Fieldwork

speed delivery, shorter lead times in production and eventually customer satisfaction (Shook et al. 2009; Walters 2014), and aligned to the NT that intends to explain the network relations among interdependent organisation (Thorelli 1986). Apart from that majority of the respondents (93.3%) saying that there was good communication between parties involved in the measurement system, this may improve continuous flow of information in the value chain (Lambert and Cooper 2000; Cho et al. 2012). Again, some of the respondents were of the opinion that obsolete measures were discarded and new ones implemented when necessary (Neely et al. 2002; MacBryde et al. 2012). However, some of the respondents did not use this exercise, which signals ineffectiveness and threatens successful SCM. It signals to the PAT of a company that when two parties involved in the desired objective have one line of communication they may have conflicting results (Halldorsson et al. 2007; Ketchen et al. 2007). Furthermore, almost 100% felt that their businesses were sustainable, with the exception of 6.7% who did not respond to this question. This is contrary to the failure rate postulated about SMEs (Jones 2009; Fatoki 2014).

CONCLUSION

Performance measures are deemed key in SCM. The purpose of the study was to "to investigate the extent to which SMEs recognise the significance of non-financial performance measures in their supply chain management to increase its profitability". A positivist paradigm was followed using questionnaires as the research instruments to gather data purposively from SMEs manufacturers around the Cape metropole in Cape Town, South Africa. The data was used to yield descriptive results through SPSS. Results indicate that SMEs do consider and recognise the significance of non-financial performance measures and to some extent incorporate these measures to their SCM. Of major concern is that despite using/employing non-financial performance measures the majority of the respondents reported that measures were not being formally implemented. However, these respondents were also of the opinion that it worked for them and their businesses were doing well, as shown by the 100% response rate. Results indicated that most of the respondents' businesses had been in operation for more than a decade, which contradicts the literature regarding a high failure rate of SMEs in their first few years of start up. However this contradiction

may be limited to this study and not be generalised due to the sample size used in this paper. Most businesses paid attention to customer satisfaction measures and product quality, while the majority reported at the data collection stage that their businesses were evaluated by customers on a quarterly basis, according to quality of products, on-time delivery, defects free delivery and flexibility. Despite the progress noticed among SMEs towards the consideration of non-financial measures, all measures need to be formally implemented to ensure traceability of ineffective measures, proper evaluation, redefining, and purging obsolete measures when the need arises. However, the implementation of such strategies could be hampered by the initial capital injection required to invest in SCM. Ultimately, SMEs may be faced with shortage of manpower with the appropriate skills in SCM or faced with the cost of training on SCM.

RECOMMENDATIONS

Although these businesses are taking into consideration non-financial performance measures over and above financial performance measures, they lack strategy and their performance measures are not formally implemented. Performance measures should be well formulated and structured to enhance business processes and enable good control of the business. The lack of knowledge on how to implement, monitor and evaluate performance management systems could be a source of this informal structure of performance measures. Manufacturers need to invest in the practice and application of SCM that empower the decision-making. Manufacturers may not function in isolation and therefore proper application and practice that engage all parties involved must be maintained. Further, for SCM to be practical, information-sharing, quick response to the customers' needs and queries must be prioritised in order to attain the efficiency and effectiveness of SCM in a manufacturing environment.

SUGGESTIONS FOR FURTHER RESEARCH

Further studies may be conducted based on qualitative in-depth interviews that allow a deeper comprehension of the impact of non-financial performance measures in SMEs and perception of their training needs towards structured implementation of performance measures in their SCM. A larger scope of respondents may be used in future research so as to increase representation and allow for generalisation.

ACKNOWLEDGEMENT

The primary author wish to thank her supervisor Dr Henrie Benedict for his guidance and mentorship in her research journey.

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