

# THE ADOPTION OF MANAGEMENT ACCOUNTING PRACTICES BY SMALL AND MEDIUM CLOTHING AND TEXTILE ENTITIES IN AN EMERGING MARKET

**Sanele Phumlani Vilakazi, Durban University of Technology**  
**Lesley June Stainbank, Durban University of Technology**  
**Celani John Nyide, Durban University of Technology**

## ABSTRACT

*Small and medium enterprises (SMEs) operating in the clothing and textile sector are perceived as significant players in many emerging markets. These entities contribute considerably in providing job opportunities for many households, and they play a pivotal role in developing economies globally. However, SMEs, if not well managed, cannot fulfil their contributions and compete in a globalised business environment. Preliminary studies contend that management accounting practices (MAPs) are considered essential tools that small and medium enterprises (SMEs) in the clothing and textile sector can use to promote efficiency and sustainability. Driven by the lack of research on the use of MAPs in small and medium clothing and textile SMEs in South Africa, this paper explores the contributing role and benefits of MAPs to these entities. A quantitative descriptive survey of 51 clothing and textile manufacturing SMEs in Newcastle, KwaZulu-Natal using a self-administered questionnaire was employed having employed the census sampling method. The results indicate that budgeting systems are the most used MAPs by the investigated clothing and textile SMEs. Clothing and textile SMEs still use traditional MAPs, however, they are endeavouring to integrate the modern or newly-developed MAPs such as the use of the decision support systems into their enterprises' administration. The results indicated that the most valued role of MAPs was for planning future strategies, tactics and operations. On the other hand, certain roles of MAPs were considered not to be beneficial to the investigated clothing and textile SMEs.*

**Keywords:** Clothing and Textile entities, Emerging Market, Management Accounting Practices, SMEs.

**JEL Classification:** L67, M10, M41

## INTRODUCTION

The clothing and textile industry play a vital role in any economy. This industry is largely labour intensive, hence it is considered a major source of employment (Wadho et al., 2019). SMEs in general have attracted a myriad of interest from economic specialists, academics, professional specialists, and policymakers as these small businesses are considered to be the backbone of many economies, the engine for economic growth, a major player in job creation, productivity growth, and source of innovation in both developed and developing countries (Li & Rama, 2015; Love & Roper, 2015). Despite the importance of SMEs in emerging economies, there is a relatively high failure rate of small and medium clothing and textile business (Goworek et al., 2018). Many reasons have been provided to explain the high

failure rate of SMEs. According to Maduekwe (2015), most SMEs in emerging markets such as South Africa lack conventional management accounting skills. Budgeting, performance measurement and pricing decisions in those SMEs are largely based on unusual techniques such which are inappropriate in the modern competitive business environment (Maduekwe, 2015). Given their small size, specifically in emerging countries, SMEs are not using MAPs or are failing to take full benefit of the opportunities that MAPs might produce (Msomi et al., 2019). Management accounting supports businesses to prioritise and optimise their resources, as one can control costs or expenditure, evaluate performance, determine investments and fix prices as well as improve the overall quality of business (Chand & Dahiya, 2010; Lopez & Hiebl, 2014).

The aim of this study, therefore, was to make a critical assessment of the use and role of MAPs in small and medium clothing and textile entities operating in an emerging market, Newcastle, KwaZulu-Natal, South Africa.

## LITERATURE REVIEW

### The Role of MAPs in SMEs

According to Sharma and Kumar (2011), MAPs play a pivotal role in planning and forecasting, decision-making, modification of data, data analysis, and management control and communication. Sharma and Kumar (2011) emphasise planning and forecasting, data interpretation and decision-making to be the most important roles of MAPs. Alleyne and Weekes-Marshall (2011) allude that budgeting systems are largely used by manufacturing SMEs for planning, controlling costs, developing long-term strategies and evaluating investments. The aforementioned authors further state that MAPs are also used by manufacturing SMEs to evaluate financial performance and non-financial performance with regards to customers, as well as operations and innovations. Ahmad (2012) also assert that the majority of SMEs use MAPs to measure and evaluate performance, adding that they use the tools to control the firm's current activities. Moreover, SMEs employ MAP tools to optimise on the usage of firm's resources (AbRahman et al., 2016). In addition to this, SMEs are reported to use MAPs for planning future strategies, tactics, and operations, as well as reducing subjectivity in the decision-making processes (AbRahman et al., 2016).

### MAPs Used by SMEs Nationally and Internationally

Several studies (Abdelal & McLellan, 2011; Yalcin, 2012; Aksarany, 2012; Ahmad, 2012; Charafa & Rahmounib, 2014) that examined the adoption or use of MAPs reveal that traditional MAPs are more commonly implemented than the more recently developed MAPs. Aksarany (2012) also examined the introduction of the modern MAPs in Australia over a period of four years, and concludes that traditional MAPs were widely implemented. Having investigated the usage of new developed management accounting tools in an emerging economy, Bogsale (2013) found that activity based costing (ABC) tools, target costing, life cycle costing and just in time were the most used advanced MAPs. The new developed tools are designed to support production systems and to strive for competitive improvement to meet the challenges of worldwide competition (Bogsale, 2013). Furthermore, ABC tools and target costing had the highest rate of implementation, followed by life cycle costing and just in time. These results suggest that there has been an increasing level of awareness among manufacturing SMEs for newly developed management accounting tools. The rate of traditional management accounting tools usage has also increased compared to those in the past

(Khurram et al., 2014). The results of Bogsale (2013) indicate that the emphasis on the traditional management accounting tools remains equally important.

MAPs comprise but are not restricted to the following: costing systems, budgeting systems, performance measurement tools (PMTs), decision support systems and strategic management accounting. These tools provide a foundation for providing appropriate information to observe whether management accounting tools can offer sustainable information for decision-making and how this impacts on the financial performance of an enterprise.

### **Costing Systems**

Costing systems can be defined as a framework that is used by enterprises to assess the cost of the products or services for their profitability analysis, inventory valuation and cost control. Costing systems include absorption costing, ABC, traditional costing systems and variable costing (Obaidullah, 2013). These systems are intended to scrutinise the costs incurred by the enterprise in order to aggregate and report to management about profits (Bragg 2018). The areas reported upon can be any part of the enterprise, including: customers; departments; products and services and sales regions (Bragg, 2018). Nazarova et al. (2016) asserts that an important part of costing systems is variance analysis that illustrates the difference between the projected and actual cost.

### **Budgeting Systems**

A budget is a quantifiable expression of a strategy for a well-defined period of time that matches inputs (e.g. staff, premises, equipment costs) to planned output and objectives (Anohene, 2011; Mohd-Noor & Othman, 2012; Nazarova et al., 2016). A budget achieves a definite objective as it expresses the strategic and operating plans of business units, organisation, activities or events in measurable terms. It also enables management to monitor and control operations by setting the standards expected and addressing any deviations from the set standards (Olatunji, 2013). In addition, the budget is useful in promoting forward thinking by managers, and communicating an entity's goals to its employees (Voigt, 2010).

### **Performance Measurement Tools (PMTs)**

Financial measurement is about determining trends inside the enterprise by making use of financial information (Bruwer, 2010). Trevett (2014) considers that setting PMTs in place could provide relevant information in regard to what is taking place currently; it also delivers the starting point for a system of goal setting that will provide support in executing policies for SME development. Burney and Swanson (2010) argue that enterprises ought to, therefore, develop PMTs to evaluate their performance and to line up management actions with the enterprise's mission and objectives. Performance measurement may be critical to the success of any enterprise and should therefore be controlled effectively (Langfield-Smith et al., 2012). Performance measurement has been increasingly recognised as a vital tool to ensure that SMEs are capable of measuring their activities. Jamil and Mohamed (2011) in explaining the importance of PMTs, notes that PMTs can identify weaknesses, simplify objectives and strategies, and improve performance processes.

## Decision Support Systems

Decision support systems offer enterprises' owners or managers with appropriate information to support once-off decision making (Rouse, 2010). Markos and Sridevi (2010) states that the enterprise culture has become more documented since decision support systems profile decision-making and actions in an enterprise. Nowduri (2010) argue that a decent information system is required if suitable decisions are to be made since decisions are grounded on available information. Management accounting can generate information that can be used as a reliable foundation for decision-making processes.

## Strategic Management Accounting (SMA)

Bromwich (1990) provided a description that limits SMA to financial information that is "the provision and analysis of financial information on the enterprise's product markets and competitors' costs and cost structures and the monitoring of the enterprise's strategies and those of its competitors in these markets over a number of periods". SMA is based on the belief that an enterprise should constantly oversee the internal and external measures and trends so that timely changes can be achieved as required in the enterprise (Maroofi, 2011). Fowzia (2011) notes that even though manufacturing enterprises in emerging markets still use traditional MAPs and/or cost accounting tools, the significance of SMA in measuring multidimensional aspects of performance is quickly increasing.

## Factors Affecting the Adoption of MAPs by SMEs in an Emerging Market

Despite many managerial benefits offered by MAPs, there are different factors that inhibit SMEs from adopting them. Several studies show that the majority of SMEs in emerging economies are not exposed to MAPs evaluations (Wibowo et al., 2018; Msomi et al., 2019). A study conducted by Azudin and Mansor (2018) points out that many SMEs do not have the needed knowledge and skills to use MAPs. Largely, SMEs do not keep extensive accounting reports due to a lack of accounting awareness leading to the poor use of accounting information in financial performance (Wibowo et al., 2018; Msomi, et al. 2019). Lekhanya (2016) add that internal and external factors cause a low adoption of management accounting techniques. Internal factors such as the size of the firm, organisational strategy, and age of the firm were high causes of low adoption (Msomi et al., 2019). External factors such as competition, raw material availability, technology advancement, and existing infrastructural network and other external factors were also causes of low adoption (Amara & Benelifa, 2017). According to Maduekwe (2015), the lack of knowledge and skills among owners and managers are regarded major reasons why the use of management accounting is low within SMEs.

## RESEARCH METHODOLOGY

Reported on this article is the quantitative descriptive survey of 51 clothing and textile manufacturing SMEs in Newcastle, KwaZulu-Natal using a self-administered questionnaire. The target population consisted of a small number of clothing and textile manufacturing SMEs. Therefore, the census method was used in this study, that is data was collected from the entire population, rather than a sample (Remler & Van Ryzin, 2011). Table 1 shows the response rate of this study.

	<b>Number of respondents</b>	<b>Percentage (%)</b>
<b>Targeted respondents (total)</b>	<b>51</b>	<b>100%</b>
Delivered questionnaires	51	100%
Responses received	51	100%
Unusable responses	(3)	(5.88%)
<b>Usable responses</b>	<b>48</b>	<b>94.12%</b>

This study used the Statistical Package for the Social Sciences (SPSS) version 25 to analyse the data. Cronbach's Alpha test was performed to define the reliability of the survey questionnaire. The computed average Cronbach's alpha coefficient for the questions in the survey questionnaire was 0.707 for all variables. Thus, the responses in the questionnaires were deemed reliable and consistent as the average Cronbach's alpha coefficient that is equivalent to or more than 0.70 is considered a good estimate of internal consistency and reliability (Bruwer, 2010).

## RESEARCH FINDINGS AND DISCUSSION

Respondents were asked to describe the status of their enterprise. The main purpose of this question was to determine the registration status of the responding firms. These results are shown in Table 2.

<b>Types of businesses</b>	<b>Number</b>	<b>Percent</b>
Sole trader	13	27.1
Public company	2	4.2
Close corporation	11	22.9
Partnership	6	12.5
Private company	15	31.3
Unregistered/informal	1	2.0
<b>Total</b>	<b>48</b>	<b>100.0</b>

The results indicated that out 48 respondents, 15(31.3%) respondents were registered as private companies. This is followed by 13(27.1%) respondents who indicated they are registered as sole traders and 11(22.9%) respondents who indicated they are registered as a close corporation. Six (12.5%) respondents cited partnership, two (4.2%) respondents indicated

that they are in public companies and lastly one (2.1%) respondent indicated that the firm is an unregistered or informal business. The two major groups were therefore identified as private companies (31.3%) and sole traders (27.1%).

As far as the number of years in operation is concerned, these results are shown in Table 3 as follows:

Number of years	Number	Percent
1 – 3	13	27.1
4 – 10	17	35.4
11 – 20	17	35.4
> 20	1	2.1
<b>Total</b>	<b>48</b>	<b>100.0</b>

Table 3 above shows that 17(35.4%) respondents have been in operation for between 4-10 years and that 17(35.4%) respondents have been in business for between 10-20 years. This is followed by 13(27.1%) respondents who have been in operation for 1-3 years. Only one (2.1%) respondent had been in operation for more than 20 years. Forty-seven (97.9%) respondents have thus been in existence for 20 years or less. A little more than a third each (35.4%) had been in existence for between 4-10 years and 11-20 years each. This implies that once they survive the first three years, SMEs are progressing to the 4-20 years' category which is referred to as survivalists (Mbongo, 2011). These results indicate that these SMEs have been in existence for a while, which suggests that the responses received were from owners or managers who had rich experience and knowledge about their firms.

### **The Findings on the Role of Management Accounting in the Management of SMEs**

This section provides a detailed analysis and discussion of responses pertaining to the role played by MAPs in the management of SMES in the clothing and textile sector. 47 out of 48 respondents answered this question.

Table 4 shows respondents' levels of agreement on the roles played by MAPs in the SMEs management. The mean scores for all the items are less than 3 indicating low levels of agreement with the suggested statements. The most appreciated role in the management of SMEs is for controlling the current activities with 17(36.2%) respondents (i.e. 9 plus 8 respondents) agreeing to the statement ( $m = 2.85$ ). This was followed by 13(27.7%) (i.e. 8 plus 5 respondents) and 11(23.4%) respondents (i.e. 7 plus 4 respondents) who appreciated measuring and optimising the use of the firm's resources ( $m = 2.51$ ) and for planning the future strategies, tactics and operations ( $m = 2.49$ ) respectively. On the other hand, the results revealed that the least appreciated roles of MAPs in the management of SMEs were for evaluating performance ( $m = 2.17$ ), for reducing the subjectivity in decision making process ( $m = 2.11$ ) and for improving internal and external communication ( $m = 2.02$ ) indicated by eight (17.0%), seven (14.9%), and four (8.5%) respondents respectively.

**TABLE 4**  
**THE ROLE OF MAPS IN THE MANAGEMENT OF SMES**

<b>Roles</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>	<b>Mean</b>	<b>Std Dev.</b>	<b>Chi-square <i>p</i>-value</b>
For controlling current activities	9	15	6	8	9	47	2.85	1.42918	0.308
For evaluating performance	14	19	6	8	0	47	2.17	1.04921	0.030*
For improving internal and external communication	10	30	3	4	0	47	2.02	0.79371	0.000*
For measuring and optimizing the use of the firm's resources	14	13	7	8	5	47	2.51	1.36529	0.164
For planning the future strategies, tactics and operations	9	21	6	7	4	47	2.49	1.21355	0.001*
For reducing the subjectivity in decision making process	13	24	3	6	1	47	2.11	1.02648	0.000*
<b>Total</b>						<b>47</b>			
Note: A Likert scale of 1= strongly disagree; 2= disagree; 3= neither agree nor disagree; 4= agree; and 5= strongly agree. * = <i>p</i> -values are <0.05 and are therefore statistically significant.									

The respondents were given an opportunity to specify if they perceived any different roles for the use of MAPs. Out of 47(97.9%) respondents, only seven (14.9%) respondents provided additional roles for the use of MAPs which were not covered in the questionnaire. These roles were for improving financial reporting, for setting the costs, for identifying poor production, for budget planning and forecasting, for filling out any documents of the business, for the allocation of wages into products and for stock control. The results of the chi-square test indicated that only two roles were statistically significant in how they had been answered by the respondents with *p* values of <0.05. These were for evaluating performance and for improving internal and external communication. This indicates that there was a significant difference in how the respondents rated these two roles.

The question of whether these variables are significant in the management of SMEs is presented and discussed the next section.

### **Tests for a Correlation between the Roles of MAPs in the Management of SMEs and the Use of Selected MAPs**

Apart from the frequencies and the mean scores discussed above, a Spearman rho correlation test was also performed. All significant associations between the roles of MAPs in

management and the use of SMA are indicated by a \* or \*\*. The use of SMA was selected because of the information these MAPs contribute to the internal reports of the business. These practices were adapted from the study by Ahmad (2012), this was done because SMA practices are not used by SMEs. These results are shown in Table 5.

		<b>Absorption costing</b>	<b>Variable costing</b>	<b>Purchasing budget</b>	<b>Defect rate</b>
Monitoring the costs that occur across stages of product development	Correlation Coefficient	0.099	-0.047	-0.034	0.406
	Sig. (2-tailed)	0.678	0.844	0.883	0.244
	N	20	20	21	10
Strategic costing in determining the firm's strategy	Correlation Coefficient	0.539*	0.018	0.460*	0.304
	Sig. (2-tailed)	0.014	0.940	0.036	0.393
	N	20	20	21	10
The systematic collection of data on competition's price reactions, demand reactions and the market environment	Correlation Coefficient	0.170	0.115	-0.034	0.395
	Sig. (2-tailed)	0.474	0.629	0.884	0.258
	N	20	20	21	10
Target costing in the design of new products	Correlation Coefficient	0.651**	0.326	0.298	0.498
	Sig. (2-tailed)	0.002	0.161	0.190	0.143
	N	20	20	21	10
Taking into account any strategic factors when setting the price	Correlation Coefficient	0.503*	0.535*	0.186	0.711*
	Sig. (2-tailed)	0.024	0.015	0.420	0.021
	N	20	20	21	10
Note: ** = Correlation is significant at the 0.01 level (2-tailed) and * = Correlation is significant at the 0.05 level (2-tailed).					

With regard to the roles of MAPs in the management of SMEs, the results indicated that the correlation value between “strategic costing in determining the firm's strategy” and



“absorption costing” is 0.539\*. This is a significant positive correlation the two variables mentioned. Similarly, the correlation value between “strategic costing in determining the firm’s strategy” and “the purchasing budget” is 0.460\*. This also indicates a positive significant correlation between the two variables. The results also indicated a positive significant correlation (0.651\*\*) between the “target costing in the design of new products” and “absorption costing”. The correlation value between “taking into account any strategic factors when setting the price” and the “absorption costing” is 0.503\*. This implies a positive significant correlation between these variables. Similarly, the correlation value between “taking into account any strategic factors when setting the price” and “variable costing” is 0.535\*. This implies a positive significant correlation between these variables. There was also a correlation between “taking into account any strategic factors when setting the price” and the “defect rate” is 0.711\*. This implies a positive significant correlation between these variables. Another correlation test was also performed between the roles of MAPs in the management of SMEs and the use of other types of MAPs; however, there were no positive significant associations found between any of the variables examined.

### **LIMITATIONS OF THE STUDY**

The results of this study only provide the findings of clothing and textile SMEs in Newcastle, KwaZulu-Natal, South Africa. Moreover, the survey of this study comprised only a small number of SMEs. Therefore, the results may not be generalizable to other emerging markets.

### **IMPLICATIONS**

The results of this study provide information on the role played by MAPs in clothing and manufacturing SMEs located in Newcastle, KwaZulu-Natal, South Africa. The results could also be used to improve and interrogate strategies that can be developed to reduce the current rate of failure of SMEs in emerging markets. The results of this study may also be useful to researchers who may be interested in replicating this survey in other sectors and geographical areas and strengthen MAPs theories.

### **RECOMMENDATIONS**

Research in this field could be advanced by comparing studies of the South African situation on the extent of use of MAPs to other developing countries. Furthermore, a qualitative research method may be explored to assess the extent of the use of MAPs by clothing and textile SMEs. In addition to this, longitudinal studies are recommended to investigate how MAPs are implemented and integrated into the operations of SMEs in the clothing and textile sector in an emerging economy.

### **REFERENCES**

- Abdelal, F., & McLellan, J. (2011). Management accounting practices in Egypt: A transitional economy country. *Journal of Accounting, Business and Management*, 18(1), 105-120.
- AbRahman, N. Z. A., Omar, N., Rashid, N. M. N. N., & Ramli, A. (2016). Improving employees’ accountability and firm performance through management accounting practices. *Procedia Economics and Finance*, 35, 92-98.
- Ahmad, K. (2012). *The use of management accounting practices in Malaysian SMEs*. D. Phil., University of Exeter.

- Aksarany, D. (2012). *Technological innovations, activity based costing and satisfaction*. Master's Degree, The University of Auckland, Auckland, New Zealand.
- Alleyne, P., & Weekes-Marshall, D. (2011). An exploratory study of management accounting practices in manufacturing companies in Barbados. *International Journal of Business and Social Science*, 2(9), 49-58.
- Amara, T., & Benelifa, S. (2017). The impact of external and internal factors on the management accounting practices. *International Journal of Finance and Accounting*, 6(2), 46-58.
- Anohene, J. (2011). *Budgeting and budgetary control as management tools for enhancing financial management in local authorities, Afigya Kwabre District assembly as a case study*. MBA, Ghana, Kwame Nkrumah University of Science and Technology.
- Azudin, A., & Mansor, N. (2018). Management accounting practices of SMEs: The impact of organizational DNA, business potential and operational technology. *Asia Pacific Management Review*, 23, 222-226.
- Bogsale, E. (2013). Advanced management accounting techniques in manufacturing firms in Ethiopia. *Research Journal of Finance and Accounting*, 4(16), 9-17.
- Bragg, S. (2018). *Accounting tools: Costing System*. Available: <https://www.accountingtools.com/articles/what-is-a-costing-system.html> (Accessed 18 August 2018).
- Bromwich, M. (1990). The case for strategic management accounting: The role of accounting information for strategy in competitive markets. *Accounting, Organisations and Society*, 15(2), 27-46.
- Bruwer, J. (2010). *Sustainability of South African FMGC Retail businesses in the Cape Peninsula*. M. Tech., Cape Peninsula University of Technology, Cape Town.
- Burney, L. L., & Swanson, J. N. (2010). The relationship between balanced scorecard characteristics and managers' job satisfaction. *Journal of Managerial Issues*, 22(2): 166-181.
- Chand, M., & Dahiya, A. (2010). Application of management accounting techniques in Indian small and medium hospitality enterprises: an empirical study. *International Journal of Entrepreneurship and Small Business*, 11(1), 25-41.
- Charafa, K., & Rahmounib, A. F. (2014). Using importance performance analysis to evaluate the satisfaction of activity-based costing adopters. *Accounting and Management Information Systems*, 13(4), 665-685.
- Fowzia, R. (2011). Strategic management accounting techniques: Relationship with business strategy and strategic effectiveness of manufacturing organizations in Bangladesh. *World Journal of Management*, 3(2), 54-69.
- Goworek, H., Oxborrow, L., Claxton, S., McLaren, A., Cooper, T., & Hill, H. (2018). Managing sustainability in the fashion business: Challenges in product development for clothing longevity in the UK. *Journal of Business Research*, 117, 629-641.
- Jamil, C., & Mohamed, R. (2011). Performance measurement system (PMS) in small and medium enterprises (SMEs): A practical modified framework. *World Journal of Social Sciences*, 1(3), 200-212.
- Khurram, A., Sohail, Y., Muhammad, U., & Zahid, H. (2014). Traditional vs. contemporary management accounting practices and its role and usage across business life cycle stages: Evidence from Pakistani financial sector. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(4), 104-125.
- Langfield-Smith, K., Thorne, H., & Hilton, R. W. (2012). *Management accounting: Information for creating and managing value*. 6<sup>th</sup> ed. New York: McGraw-Hill (Pty) Ltd.
- Lekhanya, L. M. (2016). *Determinants of survival and growth of small and medium enterprises in rural KwaZulu-Natal*. PhD Thesis, University of the Western Cape.
- Lopez, O. L., & Hiebl, M. R. (2014). Management accounting in small and medium-sized enterprises: current knowledge and avenues for further research. *Journal of Management Accounting Research*, 27(1), 81-119.
- Li, Y., & Rama, M. (2015). *A spatial database for South Asia*. Washington DC: The World Bank.
- Love, J. H., & Roper, S. (2015). SME innovation, exporting and growth: A review of existing evidence. *International Small Business Journal: Researching Entrepreneurship*, 33(1), 34-50.
- Maduekwe, C. C. (2015). *The usage of management accounting tools by small and medium enterprises in Cape Metropole, South Africa*. M. Tech., Cape Peninsula University of Technology.
- Markos, S., & Sridevi, M. S. (2010). Employee engagement: The key to improving performance. *International Journal of Business and Management*, 5(12), 89-96.
- Maroofi, F. (2011). The impact of enterprise systems on corporate performance. *International Journal of Vocational and Technical Education*, 3(5), 61-70.
- Mbongo, M. (2011). Influence of managerial accounting skills on SME's on the success and growth of small and medium enterprises in Kenya. *Journal of Language, Technology and Entrepreneurship in Africa*, 3(1), 109-132.

- Mohd-Noor, I. H., & Othman, R. (2012). *Budgetary participation: How it affects performance and commitment? Accountancy Business and the Public Interest*, 2012, 53-73.
- Msomi, M. P., Ngibe, M., & Nyide, C. J. (2019). Factors influencing the adoption of management accounting practices (MAPs) by manufacturing small and medium enterprises in Durban, KwaZulu-Natal. *International of Entrepreneurship*, 23(4), 1-18.
- Nazarova, V. L., Shtiller, M. V., Selezneva, I. V., Kohut, O. Y., & Seytkhamzina, G. Z. (2016). Budgeting systems in the strategic management accounting. *Indian Journal of Science and Technology*, 9(5), 1-11.
- Nowduri, S. (2010). Management information systems and business decision making: review, analysis, and recommendations. *Journal of Management and Marketing Research*, 7, 1-10.
- Obaidullah, J. (2013). *Cost accounting systems*. Available: <https://accountingexplained.com/managerial/cost-systems/> (Accessed: 20 June 2017).
- Olatunji, T. E. (2013). The impact of accounting system on the performance of small and medium scale enterprises in Nigeria-A survey of SME's in Oyo State-Nigeria. *International Journal of Business and Management Invention*, 2(9), 13-17.
- Remler, D. K., & Van Ryzin, G. G. (2011). *Research methods in practice: strategies for description and causation*. New York: Sage Publication.
- Rouse, M. (2010). Decision support system (DSS). Available: <https://searchcio.techtarget.com/definition/decision-support-system>.
- Sharma, A. K., & Kumar, S. (2011). Effective of working-capital management on firm profitability: Empirical evidence from India. *Global Business Review*, 12(1), 159-173.
- Trevett, W. (2014). *Measure performance and set targets*. Available: <https://www.nibusinessinfo.co.uk/print/book/export/html/1977>.
- Voigt, J. M. (2010). *The theory of budgeting and its practical application in German independence Hotels*. Diploma, International University of Bad Honnef.
- Wadho, W., Goedhuys, M., & Chaudhry, A. (2019). Young innovative companies and employment creation, evidence from the Pakistani textiles sector. *World Development*, 117, 139-152.
- Wibowo, A., Panday, R., Mardiyah, S., & Prasetyo, A. (2018). Analysis of the factors affecting understanding of Small and Medium businesses in preparing financial reports. *Journal of Entrepreneurship, Business and Economics*, 6(2), 91-100.
- Yalcin, S. (2012). Adoption and benefits of management accounting practices: An inter-country comparison. *Accounting Research in Europe*, 9, 95-110.