The Impact of Standard cost as a cost control tool in the automobile industry in Durban, KwaZulu-Natal, South Africa

By

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DECLARATION

This research thesis is work originally prepared by me, Anneen Irene Aberdeen, and has never been submitted for a degree in any institution other than the Durban University of Technology for examination purposes

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The research thesis has been permitted by me as Supervisor to be submitted for examination purposes.

Signature _____

Date: 26/05/2022

Dr Odunayo Magret Olarewaju

DEDICATION

“Whatever you do, work at it with all your heart, as working for the Lord, not for human masters” Colossian 3:23. I would like to dedicate my work to the good Lord above.

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Nehemiah 8:10, "Do not grieve, for the joy of the Lord is your strength".

Thank you to the Living God for giving me the strength to complete this thesis.

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ABSTRACT

Standard cost variance analysis is a recognized expenditure control technique that has been used as part of firm's accounting function over the years. Nevertheless, there have been wide debates about its functionality in the current era. The research problem was framed around the relevance, functionality and viability of standard cost. The objectives focused on the relevance and effectiveness of standard cost as budget control tool in the automobile industry in Durban, Kwazulu-Natal, South Africa. The research questions tapered towards the critical factors affecting the relevance and effectiveness of standard cost analysis as well as its contribution to cost management and this profitability of automotive firms in Durban, South Africa, in 2021. While, the study found mixed opinions on applicability of standard cost to extant automotive firms in some regions of the global economy, there is an inclination towards its effectiveness in some automobile firms Durban, Kwazulu-Natal, South Africa. Content analysis method was employed in the study considering its suitability for social science work and also the qualitative nature of the data collected.

Cost management was found to be a source of profitability and thus competitive advantage for a number of the automotive firms surveyed. For instance, managing cost by diversifying supplier base served as a robust source of cost management, through which considerable information regarding domestic macroeconomic and international automotive market condition were gleaned. Standard cost variance analysis was described by some respondents as being relevant for the automotive sector in the geographic scope of the research, under differing conditions. As for instance, being more unsuitable for variable cost over foxed cost functions, in addition to mixed responses to strategies employed in standard cost technique adoption. Furthermore, some firms indicated that they combined balanced scorecard with standard cost method, while others did not use standard cost with any additional management tool. A few firms stated the viability of this tool for periodic forecasting which improves cost management, while others operating certain business models including retail and warranty-base firms indicated its unsuitability. Customer budgets and quality specification was found as effective in cost management. Other firms stated that operating without standard cost would culminate in bankruptcy. External considerations such as fluctuating macroeconomic outcomes of exchange rates and high shipping costs affected the viability of standard cost analysis.

The structure, composition and nature of variable and fixed costs in the total cost function of automotive firms in Durban, Kwazulu-Natal, South Africa should be factored as key managerial accounting practice tools for maintaining expenditure within budget limits, towards the objective of profit maximization. These can as well enhance the sustenance of economies of scale. In addition, technology management principles can be incorporated curtailing the variable cost component, while advanced statistical methods can be employed to cushion the radical effect of variable cost which are less stable than fixed cost. This will help ease the challenges associated with variable cost budgeting. Further research on the feasibility of standard cost variance analysis should be undertaken within a wide spectrum of industries, with the objective of shedding more light on the effect of this cost control mechanism.

Keywords: Standard cost, automobile industry, South Africa.

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CHAPTER 1: INTRODUCTION

1.1 Background to the study

Standard cost variance analysis is an important expenditure control technique that has been employed as part of firms' accounting function for many decades. However, in the light of emerging cost control and management tools, there is an extensive debate on the effectiveness of standard costs in meeting corporate objectives in the current era. Despite the criticism, research indicates that Standard cost variance analysis is still used in developed economies such as Japan, developing countries such as the United Arab Emirates, and more broadly in the manufacturing and service sector (Marie, Cheffi, Louis and Rao, 2010). In principles, the basis of cost accounting techniques is cost control and performance evaluation. In Turkey for instance, standard cost has been employed as an effective tool for inventory valuation, for product cost computation for decision support, as well as for budgeting in the primary sector and was the favoured cost control device for the vast majority of supplier firms in Turkey (Badem, Ergin and Drury, 2013:8).

Standard cost technique is important for management and other purposes considering its simplicity, affordability and ease of integration with high technology. Standard cost is also viable when it is joined with other accounting methods in building strong information systems that are suitable for a number of purposes (Marie, et. al. 2010:8).

The basic principle of Standard cost variance analysis revolves around pre-determination of what should be achieved and post-assessment of how closely targets have been maintained. This is particularly vital as unit costs have profound effects on the competitiveness of firms (Lucas, 1997: 33). Standard cost techniques are still relevant in the midst of contemporary and similarly effective cost control methods, so it is not obsolete. In all likelihood, Standard cost will continue to be used in the foreseeable future irrespective of organizational sector, size or geographical location (Marie, et. al. 2010:8).

There is evidence of similarities and differences in Standard cost technique adoption (Marie, et. al. 2010:8) found that in Dubai manufacturing and service firms favour average previous productivity as the main benchmark adopted in cost management with 47% and 50% respectively. With regard to dissimilarities, 77% of manufacturing firms used Standard cost compared to 39% of service-based firms. In addition, twelve out thirteen primary firms that responded to a survey reported adoption of standard variance analysis (Badem, et. al. 2013:81). On a country specific basis, the inventory costing feature of Standard cost is common in the industrial sector in the U.K., Dubai, and Malaysia, while the budget feature is the most important for the service sector (Marie, et. al. 2010:8).

Contingent variables such as technology, firm size, organizational structure, strategic outlook as well as the dynamics of the external environment have been found to influence management accounting practices (MAPs) (Ahmad and Zabri, 2015: 763). Management accounting practices enables effective information driven decision making over the short to long term and on an organizational or industry basis, with several accounting tools being adopted in various enterprises for this purpose. All of which tapper towards cost saving (Alleyne and Weekes-Marshal, 2011: 51).

One of the criticisms of standard cost variance analysis is that it has the potential to encourage inconsistent corporate behavioral responses in relation to strategic objectives, especially in manufacturing based firms.

In the short term, when demand for an enterprises output is altered, its profitability hinges on how fast the firm can vary its resource pool. Firms can easily adjust the quantities of some of the resources it uses such as hourly labour, raw material and power. However, for inputs such as plant capacity (machinery and building), businesses require a much longer time to make appropriate adjustments, especially if the firm was producing at an under-capacity scale to start with. Adjusting to higher demand can, in some instances, take several years such as in heavy industries that require high technology outlay, with aircraft manufacturing being a typical example. A firm's financial viability depends on its ability to seamlessly restructure its resource pool in response to demand. The time frame needs to be long enough for requisite adjustment

in the production function of all input resources, including workforce, inputs, equipment, plant capacity etc. From an industry-based perspective, this horizon is adequate for extant businesses to divest from the sector or for new firms to be created and enter the industry. Short and long term horizons have firm and industry implications. In the short run, a firm manufactures or produces under conditions that can only be changed or improved in the medium to long run, while in the long term, firms can produce under variable-plant conditions. This is applicable to small, medium and large manufacturers.

A study on standard cost technique is important because of its contribution to production efficiency and in turn gross domestic product in developing countries through its impact on small and medium enterprises, which contribute immensely to national output in less developed economies (Ahmad and Zabri, 2015: 763). In addition, some researchers highlight the fact that what is taught in school varies largely with what obtains in the corporate world, so therefore there is a theory and practice knowledge gap (Alleyne and Weekes-Marshal, 2011: 51). For this reason, this study investigated operational mechanism(s) of choosing functional management accounting tools, compared to a descriptive approach of MAPs through the lens of standard cost variance analysis. This contributes to the debate on the continued inclusion and importance of standard cost variance in management accounting syllabus is a subject matter that requires additional research (Lucas, 1997: 32). This is with respect to the relevance, effectiveness, and profitability of standard cost variance analysis.

1.2 Research problem

The emphasis on this study was on three considerations of standard cost variance analysis. Firstly, it ascertained the relevance or importance of standard cost variance analysis in general. Secondly, it looked at how functional this tool is in regulating cost. Thirdly, the viability of the use of this tool in cost management was assessed. This was undertaken within the context of several extant cost control measures available, with a view to encouraging the continuous use of standard cost technique in the automobile industry in South Africa. This study was based on undertaking an inquiry that could provide additional information to the debate among financial professionals about the viability of this cost regulation tool. As a result of its ubiquitous contribution to and impact on production, the automotive sector is dubbed the industry of industries. The automotive industry is one of the largest and sophisticated by technology intensity and managerial competence, as well as with regard to employment level and volume of output. This sector is further typified by

high entry barriers, all of which highlight managerial and operational challenges of vehicle production in South Africa (Barnes and Morris, 2008:34). An overarching goal of private organizations is earning profit from core value creation and this objective can be achieved mainly through revenue maximization and low-cost leadership. Thus, since profitability in part depends on cost minimization, cost control techniques are essential. This also requires that managers facilitate an organization's ability to control costs through several tools, one of which is standard cost variance analysis (Akenbor and Agwor, 2015: 185). As a consequence, despite the allure of the automobile sector as the archetype of advanced manufacturing, some experts doubt if developing economies such as South Africa should vigorously undertake projects aimed at expanding this sector. This is more so, considering the attendant challenges of the international insignificance and yet national significance of the automobile sector in South Africa. An outlook typified by intensified international competition and the pervasive nature of international automobile industry value chains (Barnes and Morris, 2008:37). Thus, if the perception is that standard cost variance analysis is not viable, why it is still popularly used, and, if it is widely used, why are there criticisms of its usefulness and effectiveness. Nevertheless, the South African automotive industry exemplifies industrialization challenges specifically in vehicle production. For South Africa, the history of the sector's origin through the mechanism of path dependence arising from apartheid, international sanctions as well as the adoption of import substitution strategy all contributed in framing this sector. Again, despite this history, the automobile in South Africa sector makes a substantial contribution to its gross domestic product (GDP) and yet produced less than 1% of total vehicle output (Barnes and Morris, 2008:43).

Cost control is essential in ensuring optimization of price policy of output provided for customers. Standard cost has been recognized as a performance management system to manage the price of goods and by extension control the cost of goods to customers (Steyn, 2017). Cost control, budgeting and cost reduction are some of the applications of Standard cost as an authoritative control tool (Steyn, 2017). Though Standard cost has been criticized at various levels and locations, different studies (Marie, et. al., 2010; Januarie 2016; Steyn, 2017) have shown that it is still relevant for organizations, even with the changing business environment. According to a study by Januarie (2016) on standard cost variance in industrial enterprises in the Eastern Cape, South Africa, found that standard cost variance was validated as being beneficial regarding supervision, cost management, expenditure management and scheduling, and generation of data for strategic positioning. The literature

shows that standard cost variance is appropriate for firms undertaking low variety high volume operations (Januarie, 2016); however, there is a need to study Standard cost in the automobile service industry as there is no representation of such study in the literature. The current study examined how standard cost influences cost services in the automobile service industry. Such a study can serve as a basis of comparison with similar studies in the manufacturing sector.

1.3 Aim and objectives of study

The aim of this research was to ascertain, considering the mixed opinions among financial professionals regarding the relevance of the standard cost variance analysis technique, the function and viability for enterprises in a dynamic and continuously evolving corporate world.

1.3.1 Research objectives

i. To determine the critical factors that affect the relevance and effectiveness of standard cost analysis in the automobile industry in Durban, KwaZulu-Natal.

ii. To examine the effect of standard cost variance analysis on budget control and profitability in the automobile industry in Durban, KawZulu-Natal?

The research objectives, which were derived from the aim of this study, were the central motivation for this project. The objectives highlight the basis of this work. This project aimed to access the viability of the Standard cost model in management practice (Walliman, 2011:29-30).

1.3.2 Research questions

Research questions pertain to an issue of concern that needs further attention (Creswell, 2014: 50). The research questions for this project were:

i. What are the critical factors affecting the relevance and effectiveness of Standard cost analysis in the automobile industry in Durban, KwaZulu-Natal?

ii. What is the effect of standard cost variance analysis on cost management in the automobile industry in Durban, KawZulu-Natal?

1.4 Justification and significance of the study

This study is justified by its importance to a number of groups that will benefit from the research findings. The study is important because it will build upon existing knowledge in the field in making its contributions to the body of knowledge. By adding to the body of knowledge, the benefits will apply to the academia, management consultants, business practioners, the public sector as well as manufacturers. With regard to the academia, the findings of this project will expand the pool of information and knowledge for lecturers which will enhance their duty of disseminating knowledge to students, while students will have access to an increased source of information for their personal development. This work will also expand the research frontiers to be undertaken by researchers. In addition, business practioners and manufacturers will also benefit from specific information pertaining to the automobile sector. While the public sector, will benefit from an enhanced basis for policy design, implementation and regulation. These benefits will apply to the automobile sector in South Africa in particular as well as to sector the global sector in general.

1.5 Scope of the study

The scope of this enquiry was limited to exploring the importance, functionality and viability of cost management techniques as an essential management function in businesses. It focused on standard cost variance analysis within the automobile sector in Durban, KwaZulu-Natal, South Africa, in 2001. The individuals responsible for the adoption of local cost management tools are the management and accounting staff of the above listed enterprises, who were chosen as participants so as to derive robust insight on the research topic.

1.6 Structure of the study

Chapter 1 highlights the importance of the standard cost variance technique in the light of other emerging and effective management accounting tools. The need for cost management is demonstrated by a number of factors summarized as the effects of globalization. The study deconstructs the research problem into the relevance, effectiveness and profitability of standard cost, which form the basis the aim, research objectives, research questions, as well as justification and significance.

Chapter 2 is an extensive literature review from previous research on standard cost from a number of industries, economies and perspectives. The literature review outlines the conceptual, theoretical and empirical perspectives, and summarizes the assessment to identify further research areas.

Chapter 3 delineates the research plan, which includes the research framework and study design, the sources and nature of the data used, the population of recipients and the sample along with the sampling techniques. It also states the procedure of data gathering, analytical methods, data reliability and validity. Ethical considerations are presented.

Chapter 4 presents the data and discusses the outcomes of the analysis, within the general limitations of the study.

Chapter 5 draws conclusions and makes recommendations.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Management accounting produces important information required for effective financial management decision making. As a type of management accounting tool, standard cost variance analysis has been reported to be widely adopted in firms engaged in automobile production (Alleyne and Weekes-Marshal, 2011: 51). This positions standard cost variance analysis as a descriptive as well as prescriptive management accounting tool (Lucas, 1997: 32). Over the years, structural transformation necessitated by technological and economic change has also fuelled the continuous evolution of consumer preference. Which in turn is continuously altering automobile firm's production processes, products and services. Additionally, on this continuum, are alterations to the type and scope of operational information required by management for effective decision making. As expected, despite variations in management accounting practice between firms and countries, the underlying objectives are largely the same. The dynamics of modern automobile production and management accounting practice have culminated in advances in production and cost management tools (Yalcin, 2012: 95).

2.1.1 Origin of management accounting

Management accounting emerged during the industrial revolution as an important managerial function in leading firms in sectors such as rail construction and textiles. Railroads required significant long term capital investment for the construction of track and roadbeds, which on completion, necessitated financial and operational efficiency measures for effective transportation of freight and passengers. Similarly, raw materials and labour inputs in textile production also required efficiency measures to ensure viability. With the proliferation of industrialization in the United Kingdom and the United States, management systems related to mass production were established to fulfil carious requirements for functional management purposes. Thus, financial accounting preceded management accounting, with its spread being encouraged by European merchant trade during the Italian Renaissance and the need for tax records. Double entry bookkeeping had been in practice for about three centuries ahead of the emergence of management accounting (Caplan, 2006: 9-16).

Through the course of history, industrial engineering and management accounting have developed as an interdisciplinary and multidisciplinary approach, in which the former sought scientific determination of standards for all inputs, while the latter focused on cost optimization. This culminated in the emergence of standard cost variance analysis which is currently widely employed in firms engaged in production. Management bookkeeping theories and systems advanced through the period spanning 1901 to 2000, with the core of extant management accounting practice being developed. However, the development of

MAPs occurred in a non-unified way, with leading adopters being DuPont, General Electric and General Motors. Historical accounts highlight that there was little benchmarking between manufacturing firms regarding MAPs. Possibly this was due to companies viewing these practices as proprietary resources as well as competitive enablers. Furthermore, there were no regulatory or professional associations of management accounting in this era (Caplan, 2006: 9-16).

Numerous cost control techniques have been adopted by organizations across sectors, one of which is the standard cost technique. As a result of simultaneous changes in the external business environment and ongoing research by scholars, there have been many intellectual debates on the applicability of standard cost variance analysis compared with other management tools which some regard as being more viable (Ahmad and Zabri, 2015: 763). The rationale for this work is based on a number of factors. Firstly, strategic accounting systems typically feed into financial management procedures as is the case with the product costing method which facilitates the determination of inventory balance sheet amounts. Furthermore, strategic accounting data is basically finance based in outlook and represented in currencies. However, non-financial information is being increasingly included in management accounting practice in recent times. Secondly, the costs associated with measuring, reporting and analyzing accounting information is a key factor in effective cost management. Thirdly, accurate cost

allocation across customers, products, services and subunits is vital (Caplan, 2006: 6-7).

With the evolution of the economic structure accompanied by changes in consumption and production, innovation in management accounting is inevitable, and a plethora of methods have been developed with differing levels of adoption and success (Yalcin 2012: 97). From another perspective, advances in cost accounting have heightened the need for management of cost accounting because of the increased cost accounting needs. Innovation has arisen also because the standard cost variance analysis has been in use for about a millennium and the notion that it is perceived in some quarters as an obsolete cost management tool (Ahmad and Zabri, 2015: 763). Globalization has further deepened the need for strategic cost management approaches. Therefore, strategic accounting procedures like costing methods, planning, budgeting outcome assessment and decision tools have historically been implemented (Yalcin 2012: 97). A functional cost control system should spot deviations from expected operational efficiency levels, spot emerging indications of variation, and enable the possibility of system enhancement (Luh 2001: 123). This involves a continual quest for cost reduction, process optimization, total quality management and operational effectiveness which improves customer satisfaction (Badem, Ergin and Drury, 2013: 85).

2.1.2 The cost concept

Management accounting and managerial accounting are synonymous and many accounting practitioners use the terminologies interchangeably. Cost accounting sometimes is used to refer to inventory and as such the term is typical in industrial and commercial enterprises. Management accounting is related to, for instance, the determination of whether temporal plant closure and locating inputs from other suppliers would improve a firm's profitability in the long term, independent of the in-flow inventory procedure (Caplan, 2006: 9). Cost accounting refers to costs as foregone capital aimed at increase profitability (Greenberg and Wilner, 2015: 45). Cost management is important considering that incurring cost precedes production, sales and profit making (Akenbor and Agwor, 2015: 188). In the South African context, the unit of cost is Rands. The cost of producing an item could be viewed as a collective price of numerous industrial production factors. Cost has different driving forces and they each play a vital role

when it comes to cost-related decision-making; however, the most relevant driving force is the prices of the factors of production (Greenberg and Wilner 2015: 55). The cost of input material cannot be controlled by the manufacturers as the cost is beyond the control of the manufacturers. Cost in the price of a good or service is the economic payment made to actualize certain objectives of a business decision. Price is usually measured in standard monetary units. Cost is inversely related to managerial productivity and efficiency, that is, the cost of production reduces as efficiency and/or productivity goes higher (Greenberg and Wilner 2015: 142). Strategic accounting is articulated to enhance end-to-end production and value chain organization towards increased competitiveness. Also, it corrects the disadvantages of the traditional management accounting system (MAS) in several ways.

Costs are derived from identification of cost objects, including overhead costs, selection of cost allocation as well as the development of overhead unit cost (Caplan, 2006: 115). A skilful adoption of the cost principle is necessary for viability of accounting information-based decision making (Põlajeva and Toompuu, 2010: 140).

An appropriate overview of a firm's cost structure facilitates improvement of efficiency. A firm's mastery of their cost structure precedes and enables the design of specific methods, systems, and models for enhanced management. This is also subject to the dictates of the external environment in which a firm operates in, the managerial disposition of a firm, employee capabilities and other related factors (Põlajeva and Toompuu, 2010: 141). Costs differ from expenses and are resources devoted to certain value conversion objectives in the manufacture of products and the creation of services. Expenses are charges incurred against revenue during particular accounting periods (Caplan, 2006: 20). An important feature of management is the degree of decision making, in which large firms have a number of responsibility centers and responsibility-center managers. Some of these include expenditure points, profit centers and investment ventures. Expenditure points are typical of the manufacturing sector, in which managers are responsible for handling the entire cost profile (Caplan, 2006: 12). Another feature of cost is cost object, which focuses on determining the unit manufacturing and batch cost of products, daily production, and of operating a department or factory. Also important to cost is cost drivers, which are dependent on alterations in cost structure which affect total cost outcomes as individual cost objects have cost drivers (Caplan, 2006: 73).

2.1.2.1 Cost allocation basis

The allocation base associates overhead cost with cost objects. In production enterprises, the most basic distribution base is volume of output. A key drawback of this method is the difficulty of distributing costs across products in diversified firms. However, regardless of the base adopted, it should have a common denominator for the entire spectrum of cost objects and this is achieved by using direct labour costs expended by total output produced. Nevertheless, it is inappropriate to distribute production overheads with regard to the quantity of work undertaken in each division in diversified firms. The expenditure rate is the proportion between cost pool overhead and total output of the allocation base (Caplan, 2006: 77).

2.1.2.2 Normal costing

In practice, many firms compute and adopt the overhead rate with the budgeted overhead expenditure and allocated output of the distribution base in place of actual overhead expenditure and actual quantity of the distribution base. Thus, normal costing is when manufacturing firms use a budgeted overhead rate as its costing system which involves the multiplication of the budgeted rate by the actual amount of the allocation base incurred. Manufacturers are also at liberty to choose between budgeted numbers in the overhead cost pool and the total quantity of the allocation base since there are no fixed rules in management accounting (Caplan, 2006: 86).

2.1.2.3 Allocation of service department costs

A large number of organizations in the public, private and charity sectors as well as those that function across sectors, allocate service unit costs to production or user departments and thus to the value produced. Organizations that allocate service unit expenditure do so for determined reasons, to provide increased precise output cost data, to enhance resource utilization strategies

towards more optimal resource use. Firstly, divisional expenditure allocation and output expenditure results in more detailed captured input factor costs. Secondly, by compelling departmental heads to keep track of the cost of the service division resources expended, managers are careful to use resources on a cost benefit basis. In the third instance, by facilitating the liberty of choice or discretion, the production department is charged with the responsibility to forestall declining demand. The rationale for providing more accurate product cost information is to achieve the following objectives: improve decision making, enhance the status of external financial reporting, and adherence to obligatory agreements of regulation where cost-based pricing is employed. The incentive for enhancing resource utilization decisions and rationing limited resources is based on the difference between variable costs and fixed costs (Caplan, 2006: 131-132).

2.1.2.4 The role of costs in price setting

The essential consideration for determining the profit optimizing price is demand elasticity, which is informed by factors such as rivals' price range, total production cost, consumer demand, pre-determined price mark-up of say 30%. This is applicable to a large number of enterprises in competitive market structure, as well as those in oligopolies, which are still within their patent period and there are little or no substitute products. In general, production costs play a supporting role in price determination, while for a relatively smaller size of markets and products, costs of production are key determinants. Pricing decisions also differ in terms of the short, intermediate and long term horizons. In the short run, businesses occasionally encounter sales opportunities in which product cost-cum-revenue interface determines level of profitability. Specific information regarding additional costs becomes crucial when businesses have to fix sales price at figures above marginal production cost. Which includes additional costs plus any marginal non-production expenditure such as research and development investment. These trends have shown a trend of occurring comparatively less frequently. Thus, the circumstances necessary for maximum sale price attainment are subject to the variable costs of one-off or infrequent transactions, including surplus production capacity, one time customer, and a customer not in the normal sales channel. Excess capacity ensures that this type of order does not displace existing orders, while in the case of a one-off purchase, the price at which future purchase will occur may be dependent on the purchaser's initial purchase price in the first transaction. For a customer that is not in the normal sales channel, a price break for this

customer may induce a price break for the entire customer base. In the intermediate term, say a period of a few to twenty-four months, fixed cost based assets are inevitable; nevertheless, during this period businesses undertake substantial strategic decisions pertaining to output prices, quantity of output and the blend of products to produce. For such decisions, microeconomic tools enable combined effective pricing and the output level required to optimize profits. Actualizing this is contingent on the demand elasticity and variable production cost (additional cost of production). Over the long term, a time frame of over five years, all fixed expenditure can be varied. This is more so as plant facilities and warehouse can be built, redesigned, acquired or sold. Employees on full time salary can be recruited, job functions redefined or laid off. Furthermore, long run tenancies and related protracted agreements begin to lapse and thus are subject for review. Also, at or during this time frame, businesses' incomes should typically have surpassed expenditures, for it to persist as a going concern. Thus, the strategic accounting procedure should provide manager's with sufficient data on the sufficiency of sales prices with regard to the degree to which total costs are covered as well as the degree of return on investment. At this point in the cycle of an enterprise, strategic decisions must be concluded regarding the range of products and services that it will continue to produce and which to drop, except in the case of certain circumstances where exit cost determine otherwise (Caplan, 2006: 143-145).

2.1.3 Types of costs

Under various conditions, different types of cost are incurred by firms (Chartered Institute of Management Accounting [CIMA] 2015). The output of economic theory determines cost. Accountants and managerial economists have different views of what cost means. The following are types of cost:

a) **Accounting costs**

Accounting and auditing are components of financial management. Accounting costs are nominal expenditure with proper bookkeeping. Such costs are considered for accounting purposes only and can be identified, measured and accounted for (Kambanou and Lindahl, 2016). The following are examples of explicit costs: wages and salaries, cost of raw materials,

capital costs, interest on loans and overheads, etc.

b) **Implicit costs**

Reduction in assets, cash outflow or actual payment are not regarded as implicit costs. (Kambanou and Lindahl, 2016). Firms face costs because the resources they require to convert inputs to finished goods are scarce and also have alternative uses, thus economic costs are payments made to obtain resources. Implicit costs for organizations are the opportunity costs of using the resources that are already in the possession of an organization. These costs are present but not obvious and along with explicit costs constitute a firm's total costs. As such these costs affect a firm's profitability and producer behaviour (McConnell et al., 2012: 141).

c) Sunk cost

Expenditure made by management in the past which cannot be changed as it is beyond current management's control (Kambanou and Lindahl, 2016). Sunk costs are historical expenditure, which cannot be changed (Caplan, 2006: 20). Sunk costs cannot be avoided by strategic future decisions and as such, once incurred cannot be reversed. This could be expenditure on equipment or productive resources, which represents the purchase cost of expenditure minus its salvage value (Mishra\ and Singh, (2017).

d) Historical costs

These costs are only acknowledged when the accompanying production and operational activities have been completed. Hence, historical costs are actual costs. Historical costs are ascertained after the above costs have been ascertained and incurred (CIMA, 2015). Historical costs refers to the purchase price of property, machinery or services in which respective expenditure is the applicable base for the starting accounting classification of all asset procurement, expenses incurred, services rendered. Thus, these costs a verifiable and reliable value for identification in accounting books. However, one demerit of historical costs is the fact that accounts can be distorted during periods of frequent price distortions (Kiabel and

Nwanyanwu, 2014: 197-198).

e) Fixed costs

Fixed costs are expenditure that are not correlated to the degree of operational activity. These are outlays that are not altered with changes in the level of operational activities such as higher inputs. Fixed costs are invariable within certain activity ranges. However, these costs change when the upper range of respective operational activities are exceeded. Within certain limits, fixed costs remain the same, hence, they represent one extreme of cost behaviour (Akeem\ 2017). Fixed costs are incurred for the acquisition of the infrastructure and employees required for effective value conversion activities to be undertaken. This expenditure derives from strategic activities as well as contractual obligations over time, not necessarily from variations in value conversion effort and thus are denominated in terms of time frame. Fixed costs examples include insurance costs, property tax, and rent. Technically, the notion that fixed costs never change is an incomplete representation of this concept as this cost can vary under certain circumstances (Mishra and Singh, 2017).

f) Variable costs

This is the direct opposite of fixed costs. These are costs that vary with the level of activities. This expenditure type has an inclination to change as units of production increase or decrease. As production activity decreases, variable costs reduce, but as production activity increases, variable costs increase. Activity level refers to the number of units of output that a business produces. For variable cost, the unit quantity of production factors employed per price of resource is constant for each marginal unit of output made. That is, variable unit cost is constant for each produced output (Kambanou and Lindahl, 2016). Furthermore, variable costs are expenditure that change proportionately with production level, i.e., they increase when output increases and reduce when output reduces. The changes are mainly related to direct labour outlay and direct input costs. However, a variable unit cost is constant, and changes occur at the aggregate level of output and this cost is always represented in terms of time. The theory of variable cost is relative because when a strategic thrust influences cost patterns, the circumstances under which variability is determined changes, therefore the variable cost thus to be redefined (Mishra and Singh

2017).

g) Direct costs

Direct costs are the cost linked to and related to a product. It occurs when a product of cost can be connected to an output or service unit (Akeem, 2017). Drury (2017) defined direct costs as costs that are directly linked to a cost objective. Direct costs are linked to an object, activity or project and are also called prime costs (Põlajeva and Toompuu, 2010: 141). In the manufacturing sector, fixed costs apply to material or labour costs. Direct material costs include inputs that are linked with finished products and are economically tracked to specific units or batches of products. In the apparel sector for instance, these costs include the purchase of zips, buttons, fabric etc. while direct labour costs are salaries paid for the production of goods (Caplan, 2006: 75). Direct costs are expenditure which are easily associated with a particular costing unit, cost center, product, department or production activity (Mishra and Singh 2017).

h) Indirect costs

This is the opposite of direct cost and includes expenditure that is not linked to particular output. Along with direct costs, indirect costs constitutes production expenditures. Additional costs incurred to get extra work done are referred to as marginal costs. All additional fixed costs are aggregated to form incremental cost (CIMA, 2015). Indirect costs are non-core production costs such as outlay on information technology, accounting costs, training etc. (Põlajeva and Toompuu, 2010: 142). Indirect costs are incurred for joint objectives and thus are not easily associated with cost centers, products, departments, production activity or costing units. Some examples include departmental plan and machinery maintenance, power costs, lighting costs, and legal fees among others (Mishra and Singh, 2017).

2.1.4 Cost accounting standards

A central feature of cost is cost accounting standards. Cost accounting standards and practices have evolved over the years to align with extant realities. A number of primary users of cost (and revenue) information require these details for effective planning, control and decision making. Thus, cost accounting standards is a sub-set of a cost accounting system. Cost accounting standards enables a structured approach to measurement of cost in production so as to provide a guide for the achievement of uniformity and consistency in

classification and

assignment of costs to products and services. Cost standards benefits include providing better standards for costing, enabling preparation of uniform cost statements among others. Standards in costing practice also institute policies that protect investors from window dressing of financial statements and thus facilitates transparency, uniformity and consistency in financial reporting. In addition, regulators also require cost information to protect to the welfare of consumers (Mishra and Singh 2017). Cost accounting standards are based on objectives that facilitate effective cost accounting systems. Some areas of standardization include material costing; employee costs; utilities; packaging; administrative overheads; direct costs; capacity determination; repair and maintenance costs; selling and distribution; interests and financing charges; depreciation and amortization; production and operations overheads; research and development; quality control among others (Mishra and Singh, 2017).

2.1.5 Cost system installation

A costing system is a procedure adopted by firms which aggregates expenditure, allocating them to expenditure targets and reporting. Cost systems facilitate the ascertainment of the rate of return as well as aid strategic planning and control of core value conversion activities. Cost systems apply to a full spectrum of firms and need to be designed to suit the needs of organizations across organizational levels to ensure that they satisfy timeliness and efficiency. In practice, there are real challenges in implementing cost systems. Some of these include lack of support from top management, resistance from staff, non-cooperation across organization hierarchy as well as employee capacity gaps. Some approaches can be adopted in delimiting these cost system implementation difficulties. These include gaining the commitment of top management, proper briefing of accounting staff, orientation of employees to highlight the benefits, adopting organization-centric cost system, and proper post installation follow up activity to ensure proper integration of the new system (Mishra and Singh, 2017).

2.1.6 Cost control and management

Costs are categorized into controllable and non-controllable costs. The former are determined by the budget planners, while the latter is independent of control access levels

of operation.

Controllable cost can also be referred to as variable costs, while non-controllable cost can be referred to as fixed costs. The differentiation of controllable and non-controllable costs is important for cost accounting, cost control and decision-making purposes (Mishra and Singh, 2017). Cost management has been a sustained management practice, especially over the past decades as technological and economic reconfigurations have resulted in consumer sophistication which is shifting consumption preferences and thus production methods. Implicit in this is the role of MAPs in cost reduction in value conversion activities. As such, the detail and extent of accounting information required has deepened and as a consequence, MAPs have and are aligning with these expectations (Yalcin, 2012: 95). Cost control is an accounting undertaking aimed at lowering the financial worth of value conversion activities particularly in a manufacturing enterprise. Part of its objective is to ensure that respective cost elements are within the budget provision. As a routine practice, it facilitates the attainment of minimum waste of production resources and thus the financial resources of production firms (Barbole, Nalwade and Parakh, 2013: 2). Cost control deals with the element of marginal cost that is employed in estimating unit cost, and of performance appraisal of subordinates to ensure that the corporate goal of the organization is economically and effectively achieved (Akeem 2017). It controls the operations cost of a business and ensures that the business is operated within targeted/standard costs (Songini\ and Gnan, 2015). Proper control depends on the competencies of managers and supervisors, timely provision of operating statements, and details of the standard and actual costs (Songini and Gnan, 2015).

2.1.6.1 Cost control techniques

According to Akeem (2017), this refers to different ways in which organizations regulate operation cost. These ways and manners of controlling cost in organizations are implemented via the cost and management sections while they are designed and developed by the accounts department. Its three components are material control, budget control, and standard costing. There are a number of cost control methods adopted by firms including the manufacturing sector, some of which include budgetary control and benchmarking. The budgetary cost control method entails continuous comparison of projected and actual production expenditure outlays, which provides a basis for cost structure revision. The benchmarking costing technique analyses a firms costs in relation to that of the industry leaders, with a focus on indices such as

quality and time in cost determination (Barbole, et. al., 2013: 4).

a) Benefits of cost control

The following are some of the benefits of cost control. Cost control encompasses all operations of an organization, ensuring rational utilization of resources. It results in easy and rational policy making by the management and can facilitate just-in-time.

b) Challenges that are associated with cost control

According to Teng et al. (2016: 101), cost control is the system of investigating, assessing, and making comparisons of planned and actual results of costs to determine performance. Cost management is a process of assessing the expenses incurred by the organization through comparing the actual costs with the budget costs (Teng et al., 2016: 101). Challenges in cost management occur when there is no cost control technique in place or the cost control technique being utilized is not effective (Teng et al., 2016: 142).

Some of the challenges faced by cost control include: the use of obsolete methods, lack of knowledge on the use of it, too much emphasis on the results, ignoring of processes, lack of consistency in application, and poor decision making.

2.1.7 The concept of standard of costing

In standard costing, a standard as used in management accounting is a planned expenditure aimed at the creation of a single output unit, thus the standard unit cost of products is the predetermined manufacturing cost for respective units. These expenditures are computed with production projections of expected quantities of products and planned expenditure prices of such production inputs. Standard cost variance is typical of the manufacturing sector and refers to the accounting entries for costs across the value chain of activities of the production cycle, which are based on the actual figures. Closing or adjusting entries of financial records are made periodically, either monthly, quarterly or yearly, so as to distinguish the difference between actual costs incurred and the budgetary cost that was predetermined. The degree of adjustment

depends on the extent of differences between actual and budgeted costs. This encapsulates the Standard cost system (Caplan, 2006: 99). According to Abdullahj et al. (2015) Standard cost is an accounting system which utilizes the use of predetermined costs in each cost element. Thus, a Standard cost accounting system denotes a vital management accounting control system. Abdullahj et al. (2015) noted that the fundamental importance of Standard cost is that it depends on the actual costs that have been incurred in running a business. Standard cost sheds light on cost information that relates to cost control, preparation of budgets, pricing of products as well as measuring performance. However, one school of thought proposes that changes in the business landscape which have culminated in the emergence of management practices such as total quality control and just-in-time (JIT) systems seem to invalidate standard costing. This is more so considering the outcomes of lower labour cost, intense rivalry and shorter product life cycles. Nevertheless, there is evidence that Standard cost is still viable (Badem, et. al., 2013: 79). The unpopularity of Standard cost technique in firms is associated with its criticism by a number of academicians and researchers (Marie, et. al., 2010: 1). Despite diverging views on the conventional potency of Standard cost techniques, the core of management accounting skewed towards highlighting best practice for viable decision making (Lucas, 1997: 32). The viability of Standard cost can also be gleaned from a disciplinarity perspective, in which its outcome is akin to that of JIT. JIT focuses on cost reduction as an input of profitability. Cost control is an integral responsibility of management. As a cost control device, Standard cost achieves cost reduction through the combined identification and review of discrepancies from between actual and projected (standard) costs. Thus, standard cost enables firms to assess operational efficiency and degree of cost control (Luh 2001: 123). Standard cost measures can be decomposed into labour, fixed overhead and input components (Lucas, 1997: 32). Abdullahj et al. (2015) further opined that Standard cost is engaged in manufacturing industries, a good example of which is the automotive industry. Below are some of the objectives:

- Assist in setting budgets
- Assist in assessing performance of employees and management
- Top control costs through outlining benchmarks for respective costs of labour, material and overheads
- Provide detailed information for decision making
- Assist in cost control

2.1.8 The mechanism of Standard cost

Cost control is a mechanism through which firms maintain profitability as going concerns, thus it is important that business understands the functioning of the range of tools and techniques for cost regulation. This requires an understanding of the cost profile of a manufacturing outfit, which is a pre-requisite to managing leading sources of high costs. This also facilitates the classification of controllable and non-controllable costs (Barbole, et. al., 2013: 4). Cost control is one of the two main avenues of profit maximization (Akenbor and Agwor, 2015: 185).

2.1.8.1 Standard cost and cost control

According to Xing et al. (2019) organizational success depends on effective and efficient cost control, with cost control referring to all initiatives that are undertaken by organizations to regulate operational costs. Xing et al. (2019) illustrated the relationship between standard cost and cost control as follows: standard cost takes into consideration the future activities of the business and standards are regarded as measuring instruments of controls. While cost control is a key consideration of the demand for standard cost system, which tracks inventory using estimated amounts prior to production. However, considering the projection and forecasting nature of standard cost, there are usually deviations of actual costs. Nevertheless, standard cost is a viable tool for cost control and thus for management decision making (Caplan, 2006: 106). Standard cost keeps records of both expenditure budget and actual expenditure by balancing in-process activity, finished products, cost of sales and sales. The difference between planned and actual expenditure provides valuable information for cost control purposes (Caplan, 2006: 106).

2.1.9 Types of standards

Hu et al. (2017) expressed that there are four main types of standards, namely: ideal standard, attainable standard, current standard and basic standard.

a) Ideal standards

This is often described as the established standard that is designed on the basis of the maximum productive capacity of the organization. These standards are set without incorporating possible negative factors that may inhibit the achievement of the achievement of the set standard for labour standards, for instance, so do not incorporate maternity leave, sick leave, lateness and annual leave (Steyn, 2017).

b) Attainable standards

These are popularly known as practical standards (Hu et al., 2017). These standards that are set based mainly on what is regarded as practical within the organization. Attainable standards take cognizance of possible negative factors that can inhibit the attainment of established standards. For instance, in setting production standards, provision is set for loss of production due to machine breakdown, repairs and maintenance.

c) Current standards

These are standards that are set mainly because of the situation prevailing at the organization at that time (Hu et al., 2017). Current standards are constantly changed due to the fact that circumstances within the organization and industry at the large continually change.

d) Basic standard

These are standards that are set to attain a particular objective (Hu et al., 2017). In most cases basic standards are not frequently altered, thus inevitably most of them will be outdated. There is a difference in the types of standards employed by a firm's Standard cost systems between primary and supplier firms in some sectors (Badem, et. al., 2013: 84). Factors such as technology, size of enterprise, organizational structure, characteristics of the external environment as well as strategy inform the perception and implementation of MAPs.

2.1.10 Benefits of standard costing

Hu et al. (2017) identified the following as advantages of standard costing: its function as

measurement yardstick, the provision of a framework for frequent quality control, provision of decision based information, cost control function, and as a tool for employee motivation.

a) Used as a yardstick

Standard cost can be used as a yardstick to measure productivity. Standard cost variance analysis provides the standard to measure the actual versus the standard.

b) Provides a basis for regular check ups

Standard cost offers an opportunity for constant check up on the expenditures being incurred.

c) Provides information for decision making

Standard cost quickly provides management with reports for quick decision making.

d) Cost control and reduction

The comparison between actual cost and standard costs can be controlled and reduced.

e) Motivation for workers

If realistic standards are set employees will be motivated to work towards the set standards

2.1.10.1 Sarbanes-Oxley Act (SOX)

Sarbanes-Oxley Act, was legislated in response to commercial irregularities and the collapse of many firms in 2001. SOX was highlighted as an inclusive reform of United States enterprise practice since the Securities Act of 1933 (Jackson\, 2006: 41). The objective of SOX was to strengthen the independence of businesses which audit publicly traded companies and raise corporate responsibility and the functionality of corporate financial disclosure (Foley and Lardner, 2005: 14). Despite the fact that SOX was instituted primarily in response to sharp practices and monetary misconduct in public companies, its benefits include increased accountability within firms regardless of the their size and status (private vs. public) of these

enterprises (Jackson, 2006: 12). Section 802 of SOX amends the federal obstruction of the justice statute. Thus, it is now determined and acknowledged as a financial related crime to destroy, disguise, scheme or misrepresent documentations or records to limit or deter federal investigations. SOX enforces fines of up to 20 years in prison for deliberate destruction, alteration or falsification of records with the intent to hinder or influence federal investigations, including current or anticipated government proceedings against private companies (Foley and Lardner, 2005). Section 806 of SOX, under the whistle-blower protection act, purports that it is against the law for establishments to discriminate or take action against employees who reveal information or facts against fraud or irregularities (Jackson, 2006: 12).

2.1.11 Management accounting and financial accounting compared

The subject matter of accounting comprises these key sub-fields: financial accounting, management accounting and auditing. In financial accounting, the focus is on communicating accounting information to external stakeholders, while management accounting is concerned with producing accounting data for employees and managers to support them in increasing productivity as well as for the board of directors to ascertain the extent of profitability. Auditing, on the other hand, refers to scrutinizing the validity and applicability of all accounting details and this provides a user centric classification. Research indicates the implementation of strategic accounting procedures within organizations, in the public sector and in non-governmental organizations. Also, management accounting, in its relationship with financial accounting enables informed forecasts about the future of organizations. The more standardized the accounting rules are, such as Generally Accepted Accounting Principles (GAAP), as is the case in the United States, the easier investors and organizations can assess the performance of organizations. Management accounting provides detailed and tailored information for decision making, therefore, cost accounting is a substantial subset of the MAS as a result of the inventory footprint of manufacturing entities. In this way, when the emphasis is on the types of accounting techniques, cost accounting is implied, while management accounting is independent of accounting techniques. Furthermore, additional reasons for the rationale for this work is the association of strategy and operations management with management accounting. As a result of the management support function of management accounting, accountants in the subfield are required to be aware of the emerging trends,

techniques and issues that prevail in management in general. This is more so considering the fact that most challenging management accounting problems pertain to the industrial sector and thus require mastery of the basic features of the manufacturing process. The manufacturing sector can be classified with respect to the degree to which individual units of production are differentiated during and consequent to the value creation cycle, with four main categories in the production cycle. These are: continuous, mass, batch and job lot production.

- Continuous: a production method characterized by a repetitive flow of production during the working schedule of a production plant, such as oil drilling.

- Mass production a.k.a. assembly line: a production technique in which similar constituents are manufactured in sequence typically in a substantially automated operation, such as in the vehicle industry.

- Batch production: a production mechanism in which highly equivalent units of output are manufactured in lots, in which the units of each differ from each other.

- Job lot production: a production system in which respective units of output are unique, such as customer made furniture (Caplan, 2006: 6-10).

The idea of standard cost variance analysis becoming obsolete seems to stem mainly from how long it has been in use as well as the dynamic and evolving corporate world of modern times rather than about how the tool works (Badem, et. al., 2013: 85). Thus, criticisms of the loss of accounting information due to the practice of traditional cost control techniques gave birth to the development of a number of new tools such as ABC, target costing, JIT systems, among others (Badem, et. al., 2013: 85). This has raised the need to assess if standard cost variance analysis is still substantially in use, effective and profitable for organizations. This is more so as costing, and cost control are a core managerial function for manufacturing and service firms alike (Tabitha\ and Oluyinka 2016: 49). Several factors such as increased customer sophistication, potential for decreasing demand, stiffer competition, and technological change associated with globalization, have raised questions regarding whether traditional accounting techniques (and in particular standard cost variance analysis) are still capable of providing relevant information for enterprises to meet their corporate goals (Tabitha and Oluyinka, 2016: 59). At the same time, empirical studies demonstrate that Standard cost variance techniques are still in use (Tabitha and Oluyinka, 2016: 59). In general, research shows that traditional and

modern cost control techniques are widely used across businesses,

albeit with a bias towards industry and country factors (Tabitha and Oluyinka, 2016: 59).

The development and evolution of cost control in management accounting has been within the context of internal and external factors with respect to the contingency-based perspective (Ahmad and Zabri, 2014: 763). Cost control has been identified as crucial for businesses to remain profitable going concerns and this has heightened the relevance of studying cost accounting measures (Barbole, et. al., 2013: 1). Thus, the undesirability of standard cost variance analysis, as opined by some experts, is not supported by the outcomes of this work as well as research conducted in New Zealand and Britain, revealing that Standard cost is not obsolete (Sulaiman Ahmad, and Alwi, 2005: 114). Studies have shown that Standard cost variance analysis has been employed in cost control and cash flow monitoring through budgeting and planning. In addition, and in general, MAPs have been found to be extensively adopted by a sample of firms surveyed (Tabitha and Oluyinka 2016: 59). Specifically, effectiveness, information needs, the drive for best practice, timeline requirements as well as technology have been important in influencing the choice of management accounting techniques by the same sample of firms (Alleyne and Weeks-Marshal, 2011: 55). The principal role of standard cost variance analysis has been to facilitate cost control by spotting variations and examining performance when actual costs deviate significantly from benchmark costs (Luh, 2001: 123).

The oil and gas industry in Nigeria utilizes standard cost analysis as a viable tool for cost regulation. It assists in tracking the efficiency of employees, promotes cost awareness, aids decision making regarding operational activities to assess cost-effectiveness, serves as a channel of inspiration for employees to realize standard benchmarks, provides a basis for control for procurement, usage of materials and work levels.

The current study sets out to examine the effectiveness of standard cost variance analysis as a cost regulation tool and a management tool in general. This research will review perspectives on cost regulation and standard cost control drawing from a wide and diverse pool of practitioners and theorists on this subject. It discusses cost control techniques in general and standard cost variance analysis in more depth in order to investigate the effectiveness of this

management tool. While this study is focused on the service sector as a strategy to narrow and give the study a focus, the findings can be adopted in non-service-based industries as well. The service sector was selected considering its unique features and the higher innovative potential compared to other more stable and predictable manufacturing sectors.

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The adoption of Standard cost in the oil and gas industry suggests that it is an essential tool for cost regulation. It assists in tracking the efficiency of employees, promotes cost awareness, aids decision making regarding operational activities to assess cost-effectiveness, serves as a channel of inspiration for employees to realize standard benchmarks, provides a basis for control for procurement, usage of materials and work levels.

The current study sets out to examine the effectiveness of standard cost variance analysis as a cost regulation tool and a management tool in general. This research will review perspectives on cost regulation and standard cost control drawing from a wide and diverse pool of practitioners and theorists on this subject. It discusses cost control techniques in general and standard cost variance analysis in more depth in order to investigate the effectiveness of this management tool. While the study is focused on the service sector as a strategy to narrow and give the study a focus, the findings can be adopted in non-service-based industries as well. The service sector was selected considering its unique features and the higher innovative potential compared to other more stable and predictable manufacturing sectors.

2.1.12 Adoption of management accounting practices

A glance at the adoption of MAPs seems to be skewed towards larger firms rather than small and medium enterprises. (Ahmad and Zabri, 2015: 763). With regard to firm size, the

contribution of small and medium enterprises to overall economic improvement is a necessary condition for developing economies (Ahmad and Zabri, 2015: 764). The limited rate of

implementation of MAPs is possibly due to organizational capabilities with a focus on the availability of trained accounting staff as well as manager-cum-owner perception of MAPs (Ahmad and Zabri, 2015: 765). On the other hand global competition is emerging as a leading cause of the implementation of MAPs such as Standard cost technique, with its potential to lower cost and thus raise profitability (Marie, et. al., 2010: 6). Management accounting is the method of assessing and communicating data about the financial progress or otherwise of an organization, and is useful for strategy development in planning, performance appraisal and for operational control purposes. With regard to planning, this includes decision making, for instance regarding what products to produce, and where and when to undertake production, with analysis of inputs, labour and other required resources to achieve the desired output. For government agencies, this pertains to how to optimize public resource allocation among competing needs, while the non-governmental sector will focus on decisions on which programmes to fund. In the case of performance evaluation, the objective is on the assessment of the viability of separate products and brands. It also determines the extent of the contribution of specific managers and different departments within organizations or firms. In the public sector, it assesses the viability of public infrastructure investment in meeting socioeconomic improvement objectives. For non-governmental organizations, it measures the effectiveness of managers, departments and programmes in bridging the gap in socioeconomic areas where the private and public sectors were unable to provide value for. With operational control, the focus is on determining how much work is in progress in core production functions and in what phases, so as to identify bottlenecks and maintain a seamless flow of production (Caplan, 2006: 6).

2.1.13 Innovations through standard costing

The manufacturing sector has experienced both growth in technological innovation and competition for several years (Zoysa and Herath, 2007: 116) related total quality control, automation, JIT manufacturing, and supply, etc. The advancement in manufacturing technology has taken in Japan more than any other country, hence Japan was quick to abolish standard cost variance as a management accounting technique. In contemporary times, due to the advancement in manufacturing technology, conventional strategic accounting methods are regarded as not being applicable in the manufacturing sector (Zoysa and Herath, 2007: 116).

In Japan, for example, Toyota employs the JIT tool via a procedure referred to as Kanban (Zoysa and Herath, 2007: 116). The Kanban operates a pull system therefore producing what is needed only per time it is needed, while the traditional production system operates the push system which pushes parts (products) into the inventory, not paying attention to what is needed thereby resulting in delay, loss and waste. The success of the JIT system has brought tremendous benefits to the Japanese manufacturers and indeed the whole world in terms of time and cost, to mention a few.

2.1.13.1 Activity-based costing

Activity-based management, ABC, activity-based budgeting, benchmarking, balanced scorecard (BSC), total quality management (Mahal and Hossain, 2015: 65). ABC was developed and has been promoted as a mechanism for managing the systematic alterations of traditional cost accounting and for bringing relevance back to managerial accounting. A traditional system reports what money is spent on and by whom, but is incapable of reporting the cost of activities and processes (Mahal and Hossain, 2015). Many firms in the industrial sector have implemented the new costing methods. Mahal and Hossain (2015: 14) stated that there are two main reasons of ABC. The first reason is to limit cost alterations, possibly because of the ineffectiveness of traditional costing which combines all indirect costs into a single cost pool. Cost alterations are inhibited by the ABC method by implementing several expenditure pools (activities) and cost factors. The second reason pertains to the minimisation of waste of inefficient value conversion activity through its process based perspective. ABC is driven by a belief that traditional (general ledger) accounting data is not suitable for managers who need to assess how appropriately production resources have been employed in the firms. This conventional data is more suitable for external parties such as auditors interested in some evidence of financial accountability (Mahal and Hossain, 2015: 62). ABC method is detailed and involves a two stage allocation process, with the key feature of overhead cost management which derives from a range of activities and a heterogeneous cost management of different production activities involved in the production a range of products. This makes the ABC cost control method suitable for more accurate overhead cost allocation. This is more so, the ABC method targets cost factors which most suitably highlights the cost centers and the occurrence of overhead cost as the expenditure distribution basis for total cost (Caplan, 2006: 115).

2.1.13.2 Characteristics of target costing

Target costing differs from full costing, direct costing or the ABC method. Target costing is a mistranslation of what is known as the Genka Kikaku, in Japanese. Target costing comprises two main procedures: the purpose of the target cost and the attainment of it. Instituting the target sales price in the initial point in the target costing route. Everaert et al. (2006: 230) established that the target sales price involves a procedure for determining target price entails a detailed procedure. Another feature of target costing system is the initial institution of the target profit margin during the product planning of the future product. Everaert et al. (2006) additionally demonstrated that the total target profit for future products can be derived from the short and long term profit schedules which the reflects the strategic plans over the medium term. These target profits can be fragmented into target profits for each product over its expected life cycle. The third and most popular feature of target costing is that target cost is determined in the initial phases of the NPD process, prior to design and development commences. The choice of suitable level of the target cost for the new product requires some cost considerations. First, the ongoing cost is computed for a future product and outlined as the best estimate of the future product's cost. Secondly, the as-if cost is computed as an actual cost reduction, although Everaert et al. (2006: 232) found that it was improbable that Japanese enterprises they studied would successfully realize the medium term profit target, given the aggregate sales price. Thirdly, the allowable cost is calculated as the variance between the target sales price and target profit margin. Finally, the target cost is set somewhere between the as-if cost and the permissible cost, either top-down or bottom-up. In the former, the target cost is set at the level of the allowable cost, i.e., at the variance between the target sales price and the target profit margin. Target costing is a comparatively new production planning innovation, which sets goals for profits. It focuses on ensuring that unit production costs do not exceed the determined target costs. The target costing method is more suitable where certain features such as selling price and quantity are largely correctly projected (Caplan, 2006: 41).

2.2 Theoretical review

2.2.1 Standard comparative cost theory

Bojnec and Fertő (2017) explained two fundamental variations between comparative advantage and competitiveness. In the first, competitiveness typically entails a cross-country comparison of a particular product, whereas, comparative advantage is assessed between products within a country. Secondly, competitiveness is hinged on the conception of comparative advantage in relation to the changes in macroeconomic variables, while comparative advantage is structurally determined. Thus, empirically, the analytical outcomes of competitive advantage and competitiveness will yield different findings.

2.2.2 Contingency theory

Contingency theory is appropriate as the theoretical framework of this enquiry as applied to organizational structure. This involves matching of suitable forms or organizational structure with definite conditions or contingencies (Otley, 2016). This author points out that there is no globally appropriate accounting system and that firms accounting methods are related to their capabilities and their strategic focus contingent on the applicable circumstances. Contingency as applied to management accounting details how some small and medium enterprise accounting managers implement specific modern costing strategies to suit their organizational structure with prevailing environmental contingencies with the overall objective of increasing profitability. The primary principle of ABC is the accurate assignment of cost to aspects of the work process in all business activities of each sector (Mahal and Hossain, 2015). ABC is a platform which classifies and allocates cost by activity, function and process instead of by product, channel partners or customer base (Kannaiah, 2015).

2.2.3 The balanced scorecard theory

On the other hand, the balanced score card (BSC) theory is also employed in this research as part of the theoretical framework for the study. Kaplan and Norton (1992, 1996) considered and suggested the BSC theory as a method of assessing project manager's productivity. The BSC is a management tool that line managers adopt in supervising business processes and project performance in relation to the organization's strategic objectives. The goal of the authors of the BSC was to provide a clear indication of the areas enterprise leaders should

assess and the key concerns they should focus their efforts on to ensure continuous business process improvements in strategic performance.

2.3 Theoretical framework

The theoretical background for this work is framed on the proposition that the Standard cost technique in management accounting practice and decision making in organizations is important and effective. The insight gathered from the current study of how standard costing's effectiveness is based on the theory of Standard cost as well as the objective of challenging and contributing to existing knowledge or creating new theories with regard to this topic. This is more so, since theoretical concepts are framed in abstract terms and thus it is necessary that they are deconstructed into constituent parts to ease understanding (Walliman, 2011: 67-69).

Contingency theory is the theoretical framework for this research, and it is explained and promoted by Varpio et al. (2019: 6). Kald, Nilsson and Rapp (2000: 197) stated that contingency theory is an ideal theoretical foundation for surveys that originated from some elements of management control systems and it is the most common method of research for studies that utilize questionnaires. Fisher (1995: 24) opined that in contingency theory, that in terms of its application to control systems, there is no one-size-fit-all.

In conclusion, the key elements of contingency theory are:

1. There are no generally accepted methods of management.
2. Organizational designs and their subsystems must align with their environment.
3. Organizations, subsystems and environments are good fits in effective organizations.
4. Organizational needs are adequately achieved when good organizational design, management style, organizational tasks as well as landscape of work group synchronizes.

Identification of all costs is fundamental to estimating total cost of ownership (Gass, Schmidt and Schmid, 2014).

2.4 Empirical review

The use of accounting systems to help apply the philosophies of systematic management to business is typically linked with the implementation of Standard cost and expenditure control. This tool was established in the early part of the twentieth century, but it was not until the 1960s with the advent of management accounting that responsible accounting commenced (Edwards, Boyns and Matthews, 2002). The central tenets of cost accounting in the iron and steel industry, as indicated by the preceding investigation, are major early innovations (Edwards, Boyns and Matthews, 2002) accompanied by incremental improvement and extension of accounting methods throughout extensive time frames. The fusion of cost and management accounting within a body of knowledge of double entry bookkeeping to produce information for departmental profit that took account of shared overhead costs, necessitated the devising of transfer prices. This is shown to have been in use in the iron ore sector towards the end of the fifteenth century (Edwards, Boyns and Matthews, 2002). The accounts of such businesses also indicate the use, for comparative reasons, of performance parameters in the form of costs per ton and physical output in particular, the quantity of input "cost" to produce a ton of pig iron (charcoal and ironstone) and a ton of bar iron (charcoal and pig iron) (Edwards, Boyns and Matthews, 2002).

Steyn (2017) evaluated the Standard cost framework to manage transport costs for a South African logistics company. The study showed how cost of fuel in the logistics company and by extension the cost of commodities could be controlled by standard costing. The study engaged a mixed method approach. It was found that to manage Standard cost variance, companies needed formal structures and accountability centers in the form of a performance management system to execute corrective measures. Slater (2010) conducted a survey research study regarding whether target costing is engaged as a strategic cost management tool in the South Africa motor manufacturing industry. Specifically, the study investigated the benefits that companies try to realize with Standard cost as well how target costing is implemented within the organization. The qualitative research involved a self-administered questionnaire. The survey was targeted at motor manufacturers in South Africa. The survey indicated that the majority of South Africa motor manufacturers adopt target costing. In fact, the study showed that most of the South Africa motor manufacturing companies that use target costing have done

so for more than ten years. Increase in profit, cost attractiveness, viability analysis, optimization of production design and set-up are some of the benefits that firms seek by engaging standard cost (Slater, 2010).

Waweru, Hoque and Uliana (2005) conducted a study of MAPs by engaging 52 South African organizations between January and April 2001. The study took a qualitative research approach. The survey revealed an increase in the employment of most MAPs as represented in the literature. The study also noted a significant alteration in management accounting techniques in South Africa; this change was attributed to the growth and development of the country since the early 1990s. Another study examined the motivation for employing Standard cost in industrial firms in the Eastern Cape when contemporary substitutes are accessible. In other words, the study examined the significance of Standard cost in nascent industrial organizations, the merits and demerits of recent alternatives as well as the effects that influence the accuracy of standard costs. The measuring instrument used was a questionnaire. Findings revealed that Standard cost was being used in Eastern Cape organizations and that those organizations engaging Standard cost had considered its pros and cons (Januarie 2016). Empirical accounts highlight the validity of the benefits of management accounting principles in effective decision making (Alleyne and Weekes-Marshal, 2011: 51). There is a broad spectrum of justifications for implementing MAPs, some of which include pricing decisions, planning, cost driver analysis, annual reporting, risk management, performance valuation, value chain analysis among others. Empirical analysis revealed differences in the level of implementation of MAPs in national and multinational enterprises. Possible justification for higher adoption in international firms include the need to track financial flows and intra-firm operational benchmarking. Research findings also indicate increased MAPs adoption in firms with primary markets in Europe as compared with enterprises with primary markets in Asia (yalcin, 2012:102).

2.5 Summary of literature review and identification of gaps

This chapter appraised extant literature on the concept of cost, ABC, types of costing, benefits of cost control, challenges associated with cost control, and cost control techniques.

Innovations of standard costing, characteristics of target costing, conceptual review, theoretical review, and empirical review were presented. Regarding the gap in literature, the aim of this research is to ascertain if the standard cost variance analysis technique is still relevant, functional and viable for enterprises in a dynamic and continuously evolving corporate world, considering the mixed opinions on this topic among management and professionals.

CHAPTER 3: RESEARCH METHOD

3.0 Introduction

This chapter sets forth the organisation and procedure for the analysis component of this research, which seeks to ascertain the critical factors impacting the importance of standard cost and the effect of standard cost on budgetary control. Considering the nature of the investigation for this research, qualitative primary data will be obtained through the instrument of questionnaire from a select number of employees of automobile firms as the sample size. The qualitative data will be analysed at the appropriate level of measurement. The analysis will further be undertaking with Nvivo 10 software. The research will also be conducted with provision for reliability and validity considerations, such that it is ethically undertaken.

3.1 Research design

Qualitative data is basically exploratory, which derives from summarized information. Qualitative data provide additional value in identifying and exploring intangible attributes under investigation. Qualitative data are usually textual observations and conclusions from qualitative data are presented as informed assertions of the meaning and experience the sample respondents (ACAPS, 2012:7-8).

Qualitative research methods are more suitable when in-depth understanding is desired. Qualitative research involves information in the form of words, pictures and related formats which are mainly categorical in nature.

Qualitative approach to research answers the why, what and how questions, from the perspective of patterns within the thematic focus of the inquiry. It adopts methods such as interviews, observation, focus groups among others (ACAPS, 2012:12).

The aim of this study was to ascertain amidst mixed opinions among management and professionals if the standard cost variance analysis technique is still relevant, functional and viable for enterprises in a dynamic and continuously evolving corporate world.

Typically, a qualitative investigation is suitable for providing answers to the above type of questions. As a qualitative investigation, the study analyses and interprets documents and transcripts of interviews. A quantitative approach would be unsuitable as the enquiry is not focused on investigating cost variance in relation to an independent and dependent variable

(Yin, 2018). Research design refers to the choice of research analysis from qualitative, quantitative or mixed methods point of view, which aids in aligning the direction of the research procedure. In a quantitative research design, some typical methods include survey and experiments, where surveys incline more to social research, with experiments to scientific research (Creswell, 2014: 40). This research effort will adopt the survey method considering the need to elicit information regarding the implementation of standard cost method. Surveys provide a calculable or numeric account of tendencies, attitude or views of a population by understudying a sample of the relevant population (Creswell, 2014: 40), which is the case with this research on the adoption and viability of Standard cost method in management accounting practice.

Qualitative research methods arise from the humanities and include methods such as case studies and narrative research. Case studies are based on stories or accounts about people or social phenomena, with the investigator reporting findings in the register of the respective discipline (Creswell, 2014: 40). In this work, the case study approach was used to assess the viability or otherwise of the Standard cost technique in modern day organizations. The importance of case studies in the work stems from the fact that this approach is applicable to a number of subject areas as it facilitates the development of in-depth analysis (Creswell, 2014: 41).

3.2 Nature and sources of data

The study followed a case study design as well as qualitative methodology to ensure examination of the Standard cost system of the automobile industry in Durban, KwaZulu-Natal, South Africa. In a case study survey, the aim is to search a particular system via comprehensive, extensive data gathering including multiple sources of evidence (Yin, 2018). Generally, case studies are used to answer "how," "why", and "what" questions (Yin, 2018).

The study investigated the perception, extent of adoption and importance of standard cost variance analysis in firms in the automobile industry in Durban, Kwazulu-Natal, South Africa. Interviews were administered and data collected from strategic employees such as chief financial officers, cost accountants who have direct responsibility of finance in ten automobile companies. The choice of ten participants was arrived at considering the availability of employees with sufficient information required for this research. Content analysis was used for this study because it provides deeper insight into information derived from documents and related sources. It is also a useful tool for social science in the systematic identification of patterns to aid analysis. This enables research projects to confirm the existence of certain words or concepts within an information pool.

Research uses data as the raw material or basis of arriving at conclusions on a research topic and the research topic determines the type of data that will be collected (Walliman, 2011: 65). Data for any research purpose are derived from two main sources, primary and secondary.

Primary data refers to information collected as close as possible to an event on which the data is being observed or collected from, while secondary data is the written or documented account of events (Huemann and Shalabh, 2016: 9). Primary data is more accurate, time consuming and usually not feasible in a number of circumstances (Walliman, 2011: 69-71).

Three main features of statistics include the subject, data and summary of findings derived from the collection, organization, summary, prediction and interpretation of data. Data in statistical terms refers to values that have been observed or collected prior to analysis. There are two main types of data for statistical analysis, quantitative and qualitative. Quantitative analysis involves numbers such as total number of respondents in this research on the viability of Standard cost technique. Qualitative data involves variables with attributes of particular unit, such as the gender of the respondents of this research on the viability of the Standard cost technique. Furthermore, quantitative data can be distinguished as discrete or continuous variables, where discrete variables are whole numbers, while discrete variables are whole numbers or figures with a limited number of values. As such they can be logically and naturally ordered. On the other hand, continuous variables in theory can take up many different values between the lowest and highest on the measurement scale. Continuous variables are typically approximated, and the degree of estimation largely depends on the object of and procedure of observation as well as the degree of precision required. These variables themselves are properties of people, objects or phenomena. Qualitative data are basically discrete as they depict attributes which by their nature are discrete are used for non-measurable quantities. As such they cannot be logically and naturally ordered. From the above, discrete numbers can be counted, while continuous numbers are measured (Huemann and Shalabh, 2016: 5-6). Qualitative data comprises observations and words, not numeric values (Taylor-Powell and Renner, 2003: 1). Data, numbers or scores are used to find statistics. Data is very much part of modern life as it can potentially improve the quality of life by understanding of the logic of how to make sense out of numbers. This is because numbers help us make decisions at the individual, corporate or public level. Intelligent use or application of numbers requires a comprehension of their meaning (Kenny, 1987: 4). The objective of data analysis for both quantitative and qualitative is to bring order and understanding, which entails a combination of a systematic approach, creativity and discipline (Taylor-Powell and Renner, 2003; 1). Data analysis and interpretation constitute the key job descriptions of statisticians, where the

interpretation component is both an art and a science, combining statistical theory and real insight in providing accurate interpretation with regards to the needs of the audience, the research outcomes, and quality of available data. Interpretation includes the meaning and implication of results with respect to the overall findings, the reliability and validity of findings (Huemann and Shalabh, 2016: 9).

3.3 Population, sampling and sampling techniques

The sample size was ten senior officials of the automobile companies in Durban. The sample size of fifteen was adopted from similar studies by Alharbi and McKenna and Whittall (2019) who used eight respondents, Coates et al (2017) who used eighteen respondents, Mjørud et al, (2017) who used twelve respondents, and Sibanda and Ramrathan (2017) who used twelve respondents. They are also consistent with the study of Laverty (2003) who stated that the time of saturation should guide the number of participants in a study.

3.3.1 Population

Population is the universe of people, objects or phenomena used in research. Sometimes, within populations, only certain groups are of interest for research. Difficulties can arise if the characteristics of the population are not known or if accessing some desired segments of the universe is not possible (Walliman, 2011: 94-95). In the case of this study, the population of this study is the total number of accountants in automobile companies in Durban. And sample which is a representative of the population is selected from the population.

3.3.2 Sampling

A sample is a subset of the data of the universe under investigation. Samples are used to estimate the results from analysis undertaken on populations. An inherent expectation of working with samples is the expected occurrence of error known as sampling errors, which can largely be controlled. There are also benefits and demerits of working with samples. Some benefits include lower cost and time in data collection with higher levels of accuracy compared to data from the entire population. Conversely, the disadvantages of sampling include sampling error and inaccuracy for usage of very small samples.

Sampling refers to the process of selecting those groups out of the total census for investigation, while the selected category is the sampling frame from which the sample is chosen. It is widely believed that research findings and conclusions reached from a large sample are more convincing than those from a smaller sample. However, the desirability of larger samples has to been balanced with the feasibilities of information, time, data, finance, and effort among

others. The size of a sample should be in direct relationship with the number of variables to be analyzed. Nevertheless, no sample size can yield the same analytical outcomes owing to sampling error which are typical of the very nature of sampling and does lead to bias. Bias is an unwanted distortion of the results from statistical analysis, as some segments of a universe will be more representative than others. This applies even if the same analytical methods are used for a number of well sourced samples from the same population. This is an important consideration as non-representative samples cannot be used to make accurate generalizations about populations. Thus, where statistical tests are required for the analysis, usually a minimum benchmark of sample size is necessary, to fulfil the realization of significant results. However, where the population is largely homogenous and the study's outcome is not to be very detailed, smaller sample sizes suffice as they can give a fair representative view of the whole (Walliman, 2011: 94-95).

3.3.3 Probability random sampling

There are essentially two sampling procedures – probability and non-probability sampling. Probability sampling yields the most reliable representation of a universe, based on random sampling. Since populations are typically dissimilar, basic random sampling techniques are not always appropriate. Whatever random sampling technique is chosen should focus on ensuring each element or subset is equally likely to be selected. This necessitates the elucidation of the issues of the extent of homogeneity or heterogeneity and distribution of the population. Non-probability sampling procedure depends on judgment or perception from experience or the statistical coincidence of statistical results so cannot usually be used to make generalizations about a population (Walliman, 2011: 94-95). For this study, the random sample method was used to arrive at the automobile firms used for this study.

3.3.4 Respondents' recruitment process

The sample size involved eleven officials from automobile companies in Durban. For the purposes of this study, automobile companies were companies doing any kind of repair and/or servicing of automobiles such as auto-mechanics, auto-electricians, car painters, vulcanizers, upholstery, etc. The population did not include automobile manufacturing and marketing

companies. A letter of introduction was taken from Durban University of Technology (DUT) to the authorities of the relevant companies to secure an approval letter (Gate Keepers letter) to conduct the interview. Also, as part of the proposal, a letter of information and letter of consent was attached to the interview schedule.

3.3.5 Data collection techniques

Data can be collected from two main sources for research, primary and secondary. Primary data refers to data that is collected from the source through a number of methods and by this feature, is more reliable. Secondary data on the other had is derived from the accounts of others in a number of forms such as from books, journals and such similar sources. The quality of secondary data depends largely in the source and methods of collection and by this fact tends to be less reliable. The basic sources of primary data include, measurement in which numbers indicating amounts and pertaining to a subject are collected; observation which entails records of events, situations etc. by the researcher, and interviews (Walliman, 2011: 70-71).

In-person interviews with all interviewees took place at their preferred time and venue. The data collection techniques included interviews, document reviews, and a field notes. Trustworthiness was ensured using peer review, member checking, debriefing of respondents, and data triangulation. Triangulating data from diverse sources such as semi-structured interviews, field notes, and document review may aid in data analysis. Time, date, and location of interviews with participants for the semi-structured in-depth interviews and document reviews were coordinated. The interviews averaged 40 minutes. Member checking was used to ensure adequate capturing of the meaning of participants' responses to the interview questions.

Questionnaires are an obvious method of collecting quantitative and qualitative data. Also known as a survey, this method enables the organization of questions and receipt of responses without the need for a detailed verbal interaction with respondents. In addition to its flexibility, and limited personal influence of the researcher, questionnaires are also a comparatively cheap approach to data collection. However, expertise and skill is required in designing an effective questionnaire. Key characteristics of this method of data collection include its being explicit,

short and simple. Questionnaires can be administered in person, by post or through electronic means (the internet), each option having its strengths and weaknesses. Questionnaires can be executed through two main options, closed and open format questions. In the former, respondents choose from given items. While this route is easy to respond to, it potentially limits the amount and depth of information collected. The latter provides for free response from respondent; however, it reduces the ease with which data can be analyzed. Some useful hints in questionnaire design and administration include pre-testing the questionnaire with a small number of respondents, in a pilot study. Questionnaires apply more in subject areas that relate directly to people. Interviews as a technique of information sourcing are appropriate for questions that require probing to obtain sufficient details and have a wide range of applications. Interviews can be structured, unstructured, or semi-structured. In structured interviews, questions are standardized. In the more flexible unstructured path, based on a question guide, respondents have more liberty in responding. A semi-structured interview is an amalgam of the previous two options (Walliman, 2011: 99-102).

3.3.6 Data analysis technique

Statistics is an umbrella term for data analysis and encapsulates the methods of collection, collation, summarizing, predicting and interpreting data (Statistics and Demography Programme, 2009: 4). Data can be categorized into two groups based on the feature of being expressed quantitatively in numbers or qualitatively in words, which further determines the way in which they are analyzed. This feature of differing methods of analyzing data based on their nature is known as levels of measurement or scales of measurement. Thus, qualitative data is analyzed at the nominal or ordinal level, involving continuous or discrete data, while quantitative data is measured at the interval or ratio level of measurement involving discrete data. Specifically, at the nominal level data is classified so that they can be easily compared with each other such that one value is different from another and is suitable for mutually exclusive data in which there is no order of the observations. On the other hand, the ordinal scale applies to data which can be ranked in some order where the variation between them cannot be articulately differentiated in which variables are classified with respect to common specific features and where precise measurement is not necessary as the fact of one variable being

more of less than the other is important. The interval level is appropriate for data that can

be precisely analyzed on a regular metric of some sort, such as Celsius, Fahrenheit in which the gradation between each degree is equal to others, with variations that can be determined, but where there is no relativity between them without a true zero point. Such that respective values are so many units more or less than another. A proportion scale of measurement is suitable for data with differences between them coupled with a definite zero point and relativity between them, which facilitates the computation of more sophisticated statistical analysis and is therefore, the most complete scale of measurement possessing a true zero whose value is naught. This characteristic of the ratio level of analysis makes it the most amendable to the most detailed range of statistical tests. (Walliman, 2011: 71-77).

Data analysis was carried out on the data gathered from the semi-structured interviews, a review of documents, and field notes. The audio recorded from the semi-structured interview and focus group discussion was transcribed after which textual transcript was uploaded to NVivo software to map data into groups and themes. Fakis et al. (2014). Are of the opinion that there are processes for recognizing and mapping themes to research questions. After translating all the audio recorded semi-structure interviews and focus group interviews and finishing member checking, the transcripts were loaded into the NVivo application from Microsoft Word to organize the data into groups and themes. Miles\ and Huberman (1994) stated that ascertaining the means of data gathering, data organization, and data storage, are essential activities that should be completed prior to the data collection phase so as to increase the efficiency of data processing. A robust data structure aimed at optimized use of data collected is achieved. The data framework can serve as a guide for future researchers that are interested in expanding the body of knowledge in the area. Data management tools such as NVivo are essential for data collation (Miles and Huberman, 1994). Fakis et al. (2014) state that a case study analysis has defined procedures for identifying and linking themes and meaning to research questions.

Data were collected using semi-structured in-person interviews, focus group discussions and document review, while the data were recorded in Microsoft Excel. Data from the interview transcriptions were organized into columns and rows, such that required details for employees such that they were collated for analysis. NVivo software version 10 was used to conduct the

data analysis. Richardson, Earnhardt and Marion (2015) suggested that NVivo 10 software

program is suitable for coding, categorizing and managing unstructured data. The data from the interview questions provided primary information with detailed insight of the type of information required for understanding the relevance, functional, and viability of standard cost variance analysis for enterprises in a dynamic and continuous evolving corporate world such as automobile companies. Aydin/ (2013) opined that data analysis is initiated with an assessment of the units of data and leads to qualitative categories.

Using NVivo 10 software program, I created a Microsoft Excel spreadsheet with rows and columns, assigning tabs for each interview question. I also performed hand-coding in allocating themes and codes to the transcript interview question and responses. The use of both manual and electronic (NVivo) data coding ensured the reliability of research outcomes. The reliability of the analysis tools was evaluated by cross-referencing the data set used in the matrices with the information categories identified in the literature review. Microsoft Excel was used to create matrices for better administration of information. With coding, the study can associate the data to the transcribed interviews (Brakewood\ and Poldrack, 2013; Kim\, 2014; Miles and Huberman, 1994). Data associated with the conceptual structure of the research was studied to establish convergence or discrepancy of outlook as well as discrepancies in data analysis. Qualitative data can be better administered by sorting data into codes for detailed insight on the case study (Lambert and Sponem, 2012). The interview was further structured in codes by respondent. Lambert and Sponem (2012) stated that a researcher can ascertain the classification and codes to the associated respondent's responses through prearranged taxonomy or codes of implication and a cooperation of responses and predetermined groupings. The main themes, insignificant themes and the serendipitous themes were identified using NViso software. The study analyzed the data collection procedure, field notes and document review and matched the outcomes with the literature review and conceptual framework. Bekhet and Zausziewski (2012) specify that the triangulation of sources contributes to accuracy of research outcome communication. I designed a pre-coding structure using the experience gained as a researcher to link the conceptual framework, the document review, field notes, and responses to the research questions to frame themes. I analyzed the data iteratively to guarantee efficiency with respect to the data gathered and collated. I used data from the field notes to provide the codes and themes match. I examined the interview answers to determine pattern matches and discrepancies. I categorized the codes and themes into the dimensions that aligned with the

framework used in the study. I reviewed the dimensions to ensure pattern correctness and precision.

The consistency of process, procedure and approaches of a research is identified as reliability (Bloomberg\ and Volpe, 2008). The purpose is to ensure that if another researcher applies the same approach to same study the same results will be achieved. Fusch\ and Ness (2015) opines that additional triangulation reinforces reliability and data adequacy.

Validity authenticates that an investigator confirms the veracity of outcomes and ensures honesty during the survey stage (Neuman\, 2011). Both internal and external validity were used in the current during the data analysis process. Data was collected, examined, and interpreted in such a way as to avoid biasness and error as much as possible as recommended by Kardish\ et al. (2015), Klehr \(2012) and Smith and Noble (2014).

In conclusion, the researcher appreciated the importance of the data being credible as well as the essence of information and data verification, which are necessary for publicizing the outcomes to a target audience. This is essential for all stakeholders, from the investigator, all respondents, supervisors, institutions and other consumers of the outcomes of research (Klehr, 2012; Smith and Noble, 2014; Yilmaz, 2013). The researcher thus used a standard interview protocol of prepared questions for all participants. The researcher asked questions in the same order from respondent to respondent and managed personal views and prejudices that might possibly have influenced the study results by observing the research design and methodology as stated.

3.3.7 Reliability and validity

3.3.7.1 Reliability

Reliability relates to the quality of research outcome. Reliability in a non-quantitative case

study highlights the guarantee of the trustworthiness of the outcome through the research tools from internal and external validity (De Massis and Kotlar, 2014; Noble and Smith, 2015). Trustworthiness refers to the consistency of research results when the procedure is repeated under similar conditions (De Massis\ and Kotlar, 2014). Dependability by investigators can be attained through a number of mechanisms such as transcript review, member checking, expert assessment, and validation procedures with respect to the quality of an inquiry (Vaismoradi et al., 2014). Noble and Smith (2015) opined that investigators can attain dependability by making available an appraisal record of the procedures and methods under which research was conducted through the following mechanisms (a) process for data gathering, coding, and analysis (a) purpose of the study as well as (c) procedure for choosing sample members. An audit procedure ensured the activity chain of this study. Transcript review, member checking, expert assessment, and validation procedures were adhered to. Qualitative research reliability entails the regularity of measures, approaches and processes across the research activity chain (Bloomberg and Volpe, 2008). The objective is to ensure that when other investigators undertake a study using the same processes outlined in this research under similar conditions listed above, the same results will be achieved. The tracking of the research procedure from data gathering through analysis and findings highlights tremendous transparency and thus reliability. Fusch and Ness (2015) propose that additional triangulation reinforces reliability. This is realized by maintaining the same questions and requests for extra material, which confirms that the data will be constant and reliable. I followed the approach above which confirms that my research work is reliable.

3.3.7.2 Validity

Non-qualitative validity confirms that an investigator assessed the accuracy of results and ensures truthfulness across the stages of the study operation (Neuman, 2011). Yin (2018) deconstructs validity into internal validity, external validity and construct validity. This research employed validity procedures as outlined by Saunders\ and Rojon (2014), Tanggaard\ (2014), and Zohrabi (2013) through the adoption of multiple sources of data (in-depth semi-structured interviews, assessment of documents and notes from the field notes). The data collection procedures, analysis and interpretation was undertaken in a manner that was objective and unbiased as detailed by Kardish et al. (2015), Klehr (2012), and Smith and Noble

(2014).

Construct validity. This indicates the development of adequate functional set of methods to confirm an investigator's considered philosophies. It implies the extent to which projections will be justifiably made from the operationalization of the study to the theoretical constructs on which it is framed. As with external validity, construct validity is associated with generalization. However, external validity entails conclusions from the research to the concept of a research work (Klehr, 2012; Smith and Noble, 2014; Yin, 2018).

Internal validity is associated with descriptive case studies when a researcher seeks to elucidate how and why activity X results in outcome Y (Yin, 2018). Integrity refers to the assurance that research results are believable from the view of the research participants (Roulston and Shelton, 2015). Researchers guarantee the integrity of their investigation conclusions when they signify a precise explanation of human experiences to which people can relate (Houghton et al., 2013; Noble and Smith, 2015). To ensure credibility, this work interviewed the participants while adhering to the interview etiquette and spent sufficient time in the interview operation to attain detailed insight of the case so as to get a detailed understanding of the research questions. This work adopted member checking to ensure reliability and validity of data, after undertaking the interviews and translating the audio notes. The transcription was interpreted and distributed to research participants so as to obtain feedback, which reinforced the validity of the data.

External validity represents the attempt to assess the generalization of the research beyond the mandate of the study (Yin, 2018). Some of the human errors that could distort external validity at the source of data collection include (a) Using an environment that is noisy during data collection, (b) Collection of data during office hours and inside the office environment, (c) Lack of case study protocol, (d) Overfamiliarity with interviewee, (e) Not explaining the purpose of the study to the interviewee, and (f) Not getting consent for audio recording and use of single response. With the insight of the need for credible data procedures, the ability to confirm it and the potential to transfer it are the hallmarks of a valid qualitative study. This confirms the truth for the researcher, the participant, and external users (Klehr, 2012; Smith and Noble, 2014; Yilmaz, 2013). This work ensured that standard investigation procedures

were observed in the development of questions for respondents. Thus, the questions were designed in such a way that there was consistency across respondents. Also the personal prejudices and biases of the researcher were minimized as much as possible, such that the potential of distorting the investigations was as much as possible eliminated.

3.3.8 Ethical considerations

In ethical research, participant's rights and interest are protected. In this study, to protect participants, they were told that they had reserve the option to agree or reject the offer to be involved in the investigation. Interviewees were told that there were no penalties for pulling out of the interview at any stage of the interview process, hence they could back out of the interview at any time. All these were indicated in the letter of consent. With respect to data/identity protection, data collected from the interview stored on the computer, external hard drive and flash drive will be permanently deleted after being kept safely for five years. Also, hardcopies of the interview schedules and other relevant supporting documents from the interview notes and transcripts will be shredded (Seidman\, 2006). Covid-19 protocols were adhered to all through the study process. Ethical clearance was achieved from the relevant DUT authority. In addition, gatekeepers' letters were requested from the automobile enterprises.

CHAPTER 4: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis of data collected from respondents. It includes the results of the investigation, which focuses on the viability of standard cost variance analysis technique in automotive firms in Durban. The results and discussion derives from the primary and qualitative data collected on the subject matter, with the objective of streamlining understanding of the function of standard cost variance analysis in the industry in Durban.

4.2 Data for the study

The survey method was adopted in collecting primary data for this project from designated managers in target firms in the automotive sector in, Durban. In-person interviews were conducted with target respondents to elicit information regarding the status of standard variance analysis. Data were analysed using NVivo software. The findings are expected to lead to improved decision making with respect to standard variance analysis under prevailing business conditions.

4.3 Analysis of data

The qualitative data analysis computer software, NVivo, was used for data analysis. This software was chosen considering its suitability for its ability to enhance the classification, sorting and arrangement of key words generated from the survey, as suggested by Richardson, Earnhardt and Marion (2015).

4.4 Results and discussion

The results highlight the findings of this study, while the discussion provides explanation and interpretation in context. The results and discussion are informed by the qualitative case study research design aimed at providing a thorough account of the extent and impact of implementation of the standard cost variance technique. This was derived from the responses from target officials in the automotive industry. A qualitative description of the outcome of the adoption and impact of standard cost will be discussed in a way that indicates the strengths and weakness of this cost management tool in the automotive sector in Durban. The results and discussion on the viability of standard cost variance analysis will be orientated to the relevance, approaches and basis for cost management in the chosen sector, followed by a summary of findings.

With regard to budget control and actualization, despite the facts that a few respondents reported that their companies did not adopt standard cost variance analysis, other respondents validated its applicability when employed periodically. Many respondents reported adopting an innovative approach in which the standard mark-up formula was infused with standard cost variance, while others integrated the BSC method with standard cost. Additional benefits of standard cost variance analysis as reported included input quality standards arising from the competitive structure of the supplier sub-sector, and lowering the production costs of daily routinized activities. Also, respondents confirmed that standard cost variance analysis is unsuitable for labour cost when computed on a job-by-job basis, while it has a strong appeal for variable costs as it facilitated manager's expenditure to function within production limits.

4.4.1 Aligned objective: relevance of standard cost

To determine the critical factors that affect the relevance and effectiveness of standard cost analysis in the automobile industry in Durban, KwaZulu-Natal.

4.4.1.1 Q1a: Can you please share your thoughts on how standard cost variance analysis is relevant in your daily operation?

Figure 1: Word cloud for relevance of standard cost variance analysis

Figure 1 is a pictorial representation of the indicative relevance of standard cost variance analysis in the daily operations of automotive firms in Durban. With regard to the adoption of standard cost variance analysis in the automotive sector in Durban, the vast majority of respondents indicated its relevance. However, the circumstances under which Standard cost

is suitable differed among adopting firms. Standard cost variance analysis was being used as a tool for competitive price determination, assessment of levels of profitability, as well as for competitive positioning. However, some respondents stated that it was not considered as

effective for retail and warranty-based firms, considering the after sales cost structure. The relevance of Standard cost was further supported by its role in price determination in franchise concerns, as well as the need for standardization for efficient country wide branch network management. As a key feature of business and its management, standard cost variance analysis was observed to be substantially adopted in managing variance arising from discrepancies of exchange rate and shipping costs, which is a requisite for profitability. However, respondents reported difficulties in the adoption of standard cost techniques arising from capacity factors, variability of customer-market segments, and the degree of income distribution among customers. In addition, respondents reported the adoption of other cost control techniques along with standard cost variance analysis. On the consumer front, respondents reported that standard cost variance analysis techniques furnished their firms with deeper insight into cost structures which enhanced customer engagement.

4.4.1.2 Q1b: What strategies have you employed (if any) to sustain the relevance of the standard cost analysis in your organisation?

Figure 2: Word cloud for possible strategies for the sustenance of standard cost variance analysis

Figure 2 depicts the possible strategies employed in the sustenance of standard cost variance analysis in automotive firms in Durban, as reported by the respondents. In a bid to sustain competitiveness and profitability respondents reported that their firms have adopted a number of strategies across operational areas, such as a pricing strategy that

benchmarks customer's budget and preferences as well as production cost. Sales were found to be propelled through the vehicle of sales representatives who manage designated geographic locations. Also, the management of these firms plays an active role in controlling input costs such as monitoring

fuel usage, as cost is in part determined by the extent of cost standardization and its competitiveness.

4.4.1.3 Q1c: What else would you like to share on the relevance of standard cost analysis in your organisation?

Figure 3: Word cloud for firm specific relevance of standard cost variance analysis

Figure 3 is a pictograph of the relevance of standard cost variance analysis in automotive firms in Durban, as reported by the respondents. In addition to the above summary of standard cost analysis, several other observations were confirmed. For instance, fleet owners were entitled

to discounts due to business volume, which in turn implied customer segment classification. Standard cost was found to facilitate periodic forecasting over daily, weekly, and monthly time frames which contributed to expenditure management. Employee protests raised the cost profile by negatively impacting on direct production costs and thus posed a threat to profitability. Also the highly variable production schedule culminated in substantial idle time, which increased the wage bill of firms in this sector, according to the respondents. The lack of implementation of standard cost or other budgetary control systems seemed to precede bankruptcy, which validates that cost management techniques are essential for profitability.

4.4.2 Aligned objective: Approaches to standard cost

To examine the effect of standard cost variance analysis on the profitability of cost management in the automobile industry in Durban, KwaZulu-Natal.

4.4.2.1 Q2a: Please share your thoughts on whether standard cost variance analysis is effective in cost control of your daily operations?

Figure 4: Word cloud for the effectiveness of standard cost variance analysis

Figure 4 is a symbolic illustration of the effectiveness of standard cost variance analysis in automotive firms in Durban, as reported by the respondents. The suitability of standard cost variance analysis appeared to vary across cost functions or cost centers, such as for labour cost, budgeting and tracking profitability. Considering the fact that labour cost is computed on a job-by-job basis, standard cost variance analysis turned out not to be suitable for optimizing this

cost element. With regard to variable cost, there is a strong appeal for standard cost variance analysis in managing costs. With regard to budgeting, variance analysis was found essential in helping manager's expenditure to function within production cost limits. On the whole,

standard cost was indicated to be vital in tracking profitability for automotive firms in Durban, according to the respondents.

4.4.2.2 Q2b: What strategies have you employed (if any) to sustain the effectiveness of standard cost analysis in budget control and actualization in your organisation?

Figure 5: Word cloud for relevance of standard cost variance analysis in budgetary control

Figure 5 is an illustrative representation of applicable strategies for the effectiveness of

standard cost variance analysis in maintaining the operations budget of automotive firms in Durban, as reported by the respondents. As a competitive cost control mechanism, there were mixed outcomes observed with regard to strategies employed in sustaining standard cost

variance analysis. A few respondents reported that their firms did not adopt the standard cost method, while others did not employ any strategies in sustaining standard cost management. On the other hand, the balanced scorecard approach was indicated as the device for enhancing standard cost analysis. Some respondents reported that their firms employed a highly periodic strategy on a monthly basis in assessing effectiveness of standard cost variance analysis during monthly meetings. Other respondents reported that their firms employed the standard mark-up formula in undertaking standard cost variance analysis as a method of sustainable standard cost variance analysis, as requisite for profitability. In addition, standard cost variance provided credit limit opportunities in addition to its cost regulation function.

4.4.2.3 Q2c: What else would you like to share on the relevance of standard cost analysis to budget control and actualization in your organisation?

Figure 6: Word cloud for specific comments on the significance of standard cost variance analysis

Figure 6 is a graphic portrayal of the firm specific comments regarding the significance of standard cost variance analysis in the daily operations of automotive firms in Durban, according to the respondents. Respondents highlighted the relevance of standard cost variance technique with respect to customers, suppliers and their firms' daily routines. On the customer front, total quality induced from suppliers at the early stages of the value chain contributed to suitable products and services as key ingredients of customer satisfaction. With regard to suppliers, the competitive market structure necessitates competitiveness with respect to input quality, price and services delivery. Standard cost variance analysis has been effective in lowering production cost of daily routinized activities. All the above are vital for the actualization of corporate objectives of automotive firms.

4.4.3 4Aligned objective: Information basis for cost management

To identify informational resources for decision making in cost control tool selection in the automobile industry in Durban KwaZulu-Natal

4.4.3.1 3a Please can you share your thoughts on the possible information for decision making in cost control selection in your organisation?

Figure 7: Word cloud for information basis of decision making with regard to cost control technique selection

Figure 7 is an illustrative representation of the information basis for cost control tool selection of automotive firms in Durban, according to the respondents. Respondents indicated that cost must be based on customer budgets and their quality requirements. Another factor with a high tendency to inhibit the viability of this industry is the restrictive vehicle service plans which distort the organic interaction and function of the market mechanism.

4.4.3.2 3b How would you assess the effectiveness of this information in cost control selection for an organization in the automobile industry?

Figure 8: Word cloud for effectiveness of information for decision making for cost management technique selection

Figure 8 is a vivid portrayal of the effectiveness of information basis for expenditure regulation technique selection decision making. Information regarding fluctuating shipping costs, load shedding and exchange rate variations provide an effective basis for cost control technique

selection. The effectiveness of expenditure management mechanisms are strengthened when firms undertake cost management at the departmental level, which breaks down cost to functional units. This validates the effectiveness of planning with information pertaining to

exchange rate, load shedding and shipping in cost management. The lack of the information in these areas will result in an incomplete basis of cost control in particular and corporate strategy in general, which will limit profitability of firms in the automotive industry.

4.4.3.3 3c What else would you like to share regarding how you stayed within budget by adopting either standard cost variance analysis, or another system of costing, in your organisation?

Figure 9: Word cloud for unique approaches to operating within budgets

Figure 9 is an illustrative depiction of the unique strategies automotive firms in Durban used to operate within budgets, according to the respondents. Management teams of the firms in this sector, according to the respondents, were found to participate in decision making; for instance they undertake routine management activities such as fuel usage management as part of cost reduction objectives. Pricing appears to be determined by customers' budget and external stakeholders' needs, while firm's pricing criteria is based on cost management to ensure effective positioning. In addition, respondents stated that their firms were guided by defined policies and procedures devised from the head office. Respondents noted a few challenges facing this industry, such as high importation costs coupled with volatility of international economic factors such as fluctuating exchange rates, and the emergence of the novel Covid 19 virus, and unforeseen changes in logistics characterized by distinctive weekly and annual variability compound stocking processes.

From experience, respondents indicated that irrespective of the cost control method employed, working with more than one supplier provides the information basis for comparing input cost. This further expands the information frame regarding the extent of international economic factors such as exchange rate, inflation etc. and their effect on fluctuations of input cost. This increased source of information for production cost profile further contributes to the determination of other variable and fixed costs such as labour costs, production infrastructure size, and sourcing as well as purchasing from cheaper suppliers in a bid to keep cost within budgets. This is especially important for the automotive sector in Durban, as effective cost control devices precede effective actualization of breakeven point and thus profitability.

CHAPTER 5: SUMMARY, CONCUSIONS AND RECOMMENDATIONS

5.1 Summary of findings

The standard cost technique was described by respondents as being relevant for the automotive sector in Durban, KwaZulu-Natal, South Africa, under various conditions. For instance, this cost management tool was reported by respondents as being unsuitable for firms operating certain business models such as retail and warranty-based enterprises. In addition, standard cost techniques was reported by respondents to be viable for periodic forecasting which contributes to the effectiveness of cost management. Respondents described operating without any cost control tools as a strategy that would culminate in bankruptcy. With respect to approaches to standard costing, respondents reported that the suitability of this cost control technique varied across cost functions with a strong appeal for standard cost variance analysis in variables over fixed cost functions. Also, there were mixed responses to strategies employed in standard cost technique adoption. Some respondents indicated that their firms undertook a complementary approach combining balanced scorecard with standard costing, while a number of other respondents did not support variance analysis with any particular additional management tool. With information as the basis for standard cost variance analysis adoption, customer budgets and their quality requirements formed a basis for cost management. However, restrictive service plan policies distorted the organic interaction and function of the market mechanism in the industry. Furthermore, cost management was found to be a source of profitability and thus competitive advantage for respondents' automotive firms. This potential is however, constrained by external and international economic factors such as high shipping costs, etc. Firms also indicated that managing costs by purchasing from a number of suppliers provided a robust source of cost management, through providing substantial information on the state of the international market conditions in the automotive sector.

5.2 Recommendations

The structure, composition and nature of fixed and variable costs should be included as key managerial accounting practice tools for maintaining expenditure within budget limits. The

function of fixed and variable costs in the total cost function of automotive firms in Durban should be adopted as vital inputs for the determination of breakeven point as well as levels of profitability. Both costs should be used by automotive firms as enablers for attaining economies of scale and the determination of profitable price levels. Furthermore, by effectively grouping of costs as fixed or variable, firms in the automotive industry will be able to make more logical expenditure decisions such that they operate within budgets. A distinction in the roles of these costs can be employed in determining production volume and extent of profitability. For instance, higher fixed costs require a larger production and sales volume to break even and attain profitability, while increasing variable cost should be matched with higher profit per sale for profitability. Automotive firms can adopt technology management principles in cutting the variable cost component of their cost profile considering this cost increases with rising output levels. This will facilitate the higher unit profit required for viability. Advanced statistical methods should be employed to cushion the radical effect of variable costs since they are less stable than fixed costs that are largely predictable. This will also reduce the difficulties associated with variable cost budgeting. Further research on the feasibility of standard cost variance analysis should be undertaken within a wide spectrum of industries, with the objective of shedding more light on the effect of this cost control mechanism.

5.3 Conclusion

The account and experience of respondents working within the automotive industry in Durban, KwaZulu-Natal, South Africa, indicates that the standard cost variance analysis is viable for firms in the automotive industry in this area. Standard cost variance analysis was also found to be suitable for applicable sectors and especially firms that undertake periodic forecasts. The potential of standard cost variance analysis and other cost management techniques is further validated by the fact that operating without any cost control tool potentially culminates in declining revenue, profitability and eventually bankruptcy. Input from customer budgets and quality requirements provides a substantial basis for cost control as firms in this sector can plan to provide products and services with key consumption information.

Restrictive service settings tend to inhibit market dynamism; this mechanism facilitates

competition and limits waste of all resources industry wide. Consistent with the theory of the firm, enterprises can typically maximize profit through cost minimization mechanisms. This is more so for competitive sectors, with limited potential to increase price over the market maximum. The fluctuations in the international market support the theory of the risk of international trade. The multiple supplier factor further validates the fact that informed strategies can improve firms' internal positioning in limiting the negative effects of the external environment.

5.4 Limitations of the study

As with almost all studies, the important findings of this research are not absolute as a result of some demerits of the study. Thus, a single study like this one should be considered as a facet of the larger body of knowledge on standard cost variance analysis. The main limitations are sampling error due to the small size of the sample and respondent bias. In the first sampling error that is typical of working with samples, as such as sample size of ten respondents from automotive firm may not be indicative enough, considering the impracticability of obtaining lager samples as a result of resource limitations. The research focused on only one sector and thus the research outcome cannot be generalized across firms in South Africa and beyond. Considering respondents' bias, interviewees may have responded in such a way that projects their companies in a better light. However, the findings provide important research outcomes that can informed enhanced management accounting practice within firms.

5.5 Suggestions for further study

While the findings from this study have positive implications for management accounting practice in particular and overarching strategic management in general, further research on the reasons and effectiveness of standard cost should be undertaken. This could be done in a number of directions, such as an investigation of the applicability and viability of standard cost in manufacturing versus service businesses. Further research in this topic should also investigate the influence of economic development status of countries and the adoption of standard cost variance analysis in addition to the degree of sophistication of standard cost

variance practices. Also the impact of geographic location and standard cost should be researched. Additional research areas within this theme are firm's size, domestic firms versus multinational companies and standard costing. Other research sub-fields could include validating the viability or otherwise of standard cost techniques with fixed and variable costs components, cost control versus performance evaluation motives.

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APPENDICES

Appendix A: Ethical approval letter

DUT
DURBAN UNIVERSITY OF TECHNOLOGY
INYUVESI YASETHEKWINI YEZOBUCHWEPHESHE

FACULTY OF ACCOUNTING & INFORMATICS

Faculty Research Office
Durban University of Technology
Date: 18 June 2021

Student: Anneen Aberdeen
Student Number: 21525237
Degree: Master of Accounting
Email: 21525237@dut4life.ac.za
Supervisor: Dr Odunayo Magret Olarewaju
Supervisor email: OdunayoO@dut.ac.za

Dear Ms Aberdeen

ETHICAL APPROVAL: LEVEL 2
I am pleased to inform you that the Faculty Research Ethics Committee (FREC) following feedback from two reviewers has granted preliminary permission for you to conduct your research 'Effectiveness of standard costing as a cost control tool in the automobile industry in Durban, KwaZulu-Natal, South Africa.'

When ethics approval is granted:
You are required to present the letter at your research site(s) for permission to gather data. Please also note that your research instruments must be accompanied by the letter of information and the letter of consent for each participant, as per your research proposal.

This ethics clearance is valid from the date of provisional approval on this letter for one year. A student must apply for recertification 3 months before the date of this expiry.

Recertification is required every year until after corrections are made, after examination, and the thesis is submitted to the Faculty Registrar.

A summary of your key research findings must be submitted to the FRC on completion of your studies.

Kindest regards.

Yours sincerely

Dr Mogiveny Rajkoomar
FREC Chair
Faculty of Accounting and Informatics
Durban University of Technology
Ritson Campus
Durban, South Africa
4001

Appendix B: Letter of information

06 August 2020

LETTER OF INFORMATION

Title of the Research Study: The effectiveness of Standard costas a cost control tool in the automobile industry in Durban, KwaZulu-Natal

Principal Investigator/s/researcher: Ms Anneen Irene Aberdeen

Qualifications: National diploma in Accounting, Bachelors of Technology in Cost and Management Accounting , working towards Master's degree in Accounting

Co-Investigator/s/supervisor/s: Dr. Odunayo Magret Olarewaju PhD, CA(NIG), ACMA, CGMA

Brief Introduction and Purpose of the Study:

The proposed study aims to evaluate Standard cost as a cost control tool in the automobile industry in Durban, KwaZulu-Natal, South Africa. This study will evaluate the significance of standard costing, the effectiveness of standard cost variance analysis as a cost regulation

tool as well as the importance of cost control in the automobile industry.

Greeting – Greetings to my potential participants, trust all is well

Introduce yourself to the participant- I am master's student in accounting specializing in cost and management accounting, currently doing my second year.

Invitation to the potential participant - I would like to invite you to participate in the research that I am undertaking to complete my master's degree at the Durban University of Technology

Outline of the Procedures:

As you have been chosen to be part of the sample of this study, this form serves to provide further information about this research and your rights as a participant. Your participation is voluntary, and you may withdraw at any time. After reading this letter of information and consent, should you choose to participate please click on the checkbox at the bottom. The interviews will be distributed face to face to the automobile industry directly by the researcher and will take approximately 30-45 minutes to complete. The total interviews to be distributed by the researcher are 10 The information you give will only be used for research purpose, your identity and individual answers will be kept totally confidential. When it would be convenient for the participates to complete a set up time.

Risks or Discomforts to the Participant:

Participants will not be asked to perform any acts or make statements which might be expected to cause discomfort, compromise them, diminish their self-esteem, or cause them to experience embarrassment or regret. There are no foreseeable adverse reactions.

Explain to the participant the reasons he/she may be withdraw from the Study:

Participation is voluntary, and participants may withdraw from the study for their own personal reasons, like a lack of time to complete the interview. There will be no adverse consequences for the participants should they choose to withdraw.

Benefits:

This research will benefit by increasing and contributing to the store of information and serve as a reference source for researchers, education, students, and policymakers interested in the automobile industry.

Remuneration:

The participant will not receive any remuneration or incentive of any kind, for participating in the study

Costs of the Study:

The participant will not be expected to cover any costs towards the study

Confidentiality:

The data collection process will not involve access to confidential personal data. Participants will be assured of anonymity and confidentiality of their responses. The completed interviews, which do not contain the name of the participant or his/her enterprise, will be stored for a period of five years, and will, thereafter, be shredded.

Research-related Injury:

There will not be any compensation for any research related injury because it is very unlikely for any injury to occur while answering the interview.

Persons to contact in the Event of Any Problems or Queries:

Please contact me on 0837981984 or Dr. Odunayo Margret Olarewaju (Supervisor) on 031

373 5632 or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support, Dr. Linda Z. Linganiso on researchdirector@dut.ac.za

General:

Potential participants must be assured that participation is voluntary and the approximate number of participants to be included should be disclosed. A copy of the information letter should be issued to participants. The information letter and consent form must be explained to the participant in the primary spoken language of the research population e.g. English, in a case of confusion and misunderstanding.

Once again, the data collection process will not involve access to confidential personal data. Participants will be assured of anonymity and confidentiality of their responses. The completed interviews, which do not contain the name of the participant or his/her enterprise, will be stored for a period of five years, and will , thereafter, be shredded.

Thank you for participating.

Your assistance is greatly appreciated.

Sincerely,

Ms AI Aberdeen

Cell no.: 0837981984

Appendix C: Interview protocol

Title - Effectiveness of Standard cost as a cost control tool in the automobile industry in Durban, KwaZulu-Natal, South Africa

Goal of the study - The proposed study aims to evaluate Standard cost as a cost control tool in the automobile industry in Durban, KwaZulu-Natal, South Africa.

Research Questions

1. What are the critical factors affecting the relevance and effectiveness of Standard costanalysis in the automobile industry in Durban KwaZulu-Natal?

2. What is the effect of standard cost variance analysis on the profitability of cost management in the automobile industry in Durban KwaZulu-Natal?

3. What are the possible information resources for decision making in the cost control tool selection in the automobile industry in Durban KwaZulu-Natal?

Appendix C: Interview Protocol

The questions are:

Question 1

1. Aligned Objective - To determine the critical factors that affect the relevance and effectiveness of standard cost analysis in the automobile industry in Durban KwaZulu-Natal.

   Interview Questions: A

1.1.1.1. Can you please share your thoughts on how standard cost variance analysis is relevant in your daily operation?

1.1.1.2. What strategies have you employed (if any) to sustain the relevance of the standard cost analysis in your organization?

1.1.1.3. What else would you like to share on the relevance of standard cost analysis in your organization?

Question 2

Aligned Objective – To examine the effect of Standard coston budget control and actualization in the automobile industry in Durban KwaZulu-Natal.

Interview Questions

1.1.1.4. Please share your thoughts on whether standard cost variance analysis is effective in cost control of your daily operations?

1.1.1.5. What strategies have you employed (if any) to sustain the effectiveness of standard cost analysis in budget control and actualization in your organization?

1.1.1.6. What else would you like to share on the relevance of standard cost analysis to budget control and actualization in your organization?

Question 3

Aligned objective- To identify informational resources for decision making in cost control tool selection in the automobile industry in Durban KwaZulu- Natal.

1.1.2. Interview Questions:

1.1.2.1. Please can you share your thoughts on the possible information for decision making in cost control selection in your organization?

1.1.2.2. How would you assess the effectiveness of these information in cost control selection for an organization in the automobile industry?

1.1.2.3. What else would you like to share regarding how you stayed within budget by adopting either standard cost variance analysis , or another system of costing, in your organization?

Appendix D: Gatekeepers' letter
15 June 2021

Request for Permission to Conduct Research

Dear Manager

My name is Anneen Irene Aberdeen, a master's student at the Durban University of Technology. The research I wish to conduct for my master's dissertation is titled "Effectiveness of Standard costas a cost control tool in the automobile industry in Durban, KwaZulu-Natal, South Africa.

I am hereby seeking your consent to conduct research on the Automobile industry within Durban, KwaZulu-Natal. The study I am conducting is targeting the automobile service industry in Durban KwaZulu Natal. Therefore, I need automobile service companies for sampling primary data. Therefore, I need your consent before I proceed with data collection.

I have provided you with a copy of my proposal which includes copies of the data collection tools and consent forms to be used in the research process, as well as a copy of the approval letter which I received from the Faculty research Ethics Committee (FREC).

I will be visiting your premises located on street on dates where I will engage with groups of employees. I will explain my research, invite questions, and ask them to volunteer to participate. All participation is on a voluntary basis with all responses being kept confidential and their identities anonymous. After obtaining their written consent, I will conduct my interviews. This process should take about 45 minutes.

If you require any further information, please do not hesitate to contact me on 0837981984 or anneenaberdeen77@gmail.com. Thank you for your time and consideration in this matter.

Yours sincerely,

Anneen Irene Aberdeen

Student no. 21525237

Durban University of Technology

Appendix E: Permission letters

BRAKEWELL (PTY) LTD

Company Registration. Nr: 1976/001105/07 Vat Registration Nr: 467 010 5222

P.O. BOX 527, NEW GERMANY, 3620
9 GRAY PLACE, PINETOWN, 3600

THE BRAKE AND CLUTCH SPECIALISTS

TELEPHONES: 031: 7011131 / 7012812 / 7029132
FAX: 031 7011556
EMAIL: admin@brakewell.co.za

18th June 2021

To Whom It May Concern:

I, Mr. A.F. Cox hereby grant permission to Anneen Aberdeen to conduct research, in the form of a questionnaire at Brakewell. Confidential information and information relating to the POPPI Act will not be disclosed.

Any queries in this regard, please contact me on 0317011131 or 0836258504.

Yours Faithfully,
BRAKEWELL (PTY) LTD

Mr. A.F. Cox
Director
AFC/afc/LResearch

A.F. COX
BRAKEWELL (PTY) LTD
P.O. BOX 527
NEW GERMANY 3620
TEL: 031 701 1131 / 083 625 8504

T . K ROTHMAN
PANELBEATERS CC

CK No: 2008/187805/23 Vat No: 4270251517
7 MASON STREET, PINETOWN 3600 - TEL/FAX: (031) - 7011706 / CEL: 083 494 2035
E - mail: tkrothman1@telkomsa.net

18 JUNE 2021

To Whom it may concern:

I Tyron Rothman owner of TK.ROTHMAN PANELBEATERS grant Anneen Aberdeen to conduct her research at TK.ROTHMAN PANELBEATERS PINETOWN.
Hope the above is in order and if you need any information please do not hesitate to contact me on the above.

MR.TK.ROTHMAN:
SIGNATURE:

Tel: 031 701 1387
031 701 7903
Fax: 086 670 7682
13 Bishop Road, Pinetown, 3610
Email: Indygofitment@polka.co.za

18 June 2021

To whom it may concern

I, Charl Momsen, grant Anneen Aberdeen to conduct her research at Indy Go Tyres, Pinetwon.

If any further info required please do not hesitate to contact myself.

Regards

Charl Momsen

TOWERS & STRUCTURES CC T/A
INDY GO FITMENT CENTRE
REG CK 98/49343/23 VAT: 4870137209
13 BISHOP ROAD, PINETOWN
TEL: (031) 701 1387 / (031) 701 7903
FAX: 086 670 7682

DATCENTRE MOTORS (PTY) Ltd / CMH Nissan Pinetown

155 Old Main Road, Pinetown
P.O Box 6, Pinetown, 3600
Tel: (031) 710 9000

To Whom it may concern:

I Ruan Joubert grant permission to Anneen Aberdeen to conduct her research at CMH Nissan Pinetown.

Hope the above is in order and if you need any more information please do not hesitate to contact me on the below details.

Thanks

Ruan Joubert
CMH Nissan Pinetown
Workshop Manager
031 710 9000

CMH DATCENTRE MOTORS
(PTY) LTD
P.O. BOX 6
PINETOWN, 3600
TEL: 031 710 9000

SUPER TYRES

SUPER TYRES (PTY) LTD
Registration No. 1973/006402/07
Vat No. 4270101472

THE NAME YOU CAN TRUST, SINCE 1971

(031) 3374521
info@supertyres.co.za
www.supertyres.co.za

Head Office Physical
95 Sylvester Ntuli Road
Durban
4001

Head Office & Accounts
P.O. Box 10035
Marine Parade
4056

17/06/2021

To whom it may concern

I Seshan Moodley grant permission to Anneen Aberdeen to conduct her research at Supertyres south coast road

Hope that the above is in order and if you need any more info please do not hesitate to contact me on the below details

SESHAN MOODLEY
Manager

SUPER TYRES (PTY) LTD
SOUTH COAST ROAD
DURBAN
Reg: 1973/006402/07
VAT 427010142
Tel: 031 465 0894 Fax 031 465 8567

Samuels
SERVICE CENTRE

Tel: 031 492 5785
24 Solomon Mahlangu Dr,
Rossburgh, Durban, 4072

2021.06.17

To whom it may concern,

I Marlon De Gee grant permission to Anneen Aberdeen to conduct her research at Samuels Service Centre.

Hope that the above is in order and if you need any more information, please do not hesitate to contact me on the below details.

Kind regards,

Marlon De Gee
Director

SAMUELS SERVICE CENTRE
24 EDWIN SWALE DRIVE
DURBAN 4094
☎ 031 492 5785
VAT NO: T.B.C

Kempster Sedgwick (Pty) Ltd t/a
CMH Kempster Ford Durban South
Registration Number: 1926/900691/07
Vat Number: 4430111916
274 Solomon Mahlangu Drive
Bluff , Durban
4052

Tel: 031 451 4700

17 June 2021

To whom it may concern,

I Brandon Carew grant permission to Anneen Aberdeen to conduct her research at CMH Kempster Ford South.

Hope that the above is in order and if you need any more information, please do not hesitate to contact me on the below details.

Kind regards

Brandon Carew
Service manager

0200691070028
KEMPSTER AUTO
274 SOLOMON MAHLANGU DRIVE
BLUFF, 4052
TEL: 031 451 4700

Vertex Auto

Vw, Audi and Seat Specialist and All other models

16A Blair Road
Pinetown
3610
Tel/Fax: 031-702 5979
E-Mail: service@vertexauto.co.za
17-06-2021

To whom it may concern

I Jonathan Pieterse grant permission to Anneen Aberdeen to conduct her research at IJ Vertex Auto cc.

We hope the above is in order and if you need any more information please do not hesitate to contact me on the above details.

Kind Regards

Jonathan F. Pieterse

VERTEX
AUTO
031 - 702 5979
16 BLAIR ROAD
PINETOWN

Auto Paint Centre KZN (Pty) Ltd
Unit 2, 152 Josiah Gumede Road
New Germany
Pinetown

Tel: 031 054 5044
Email: shaun@apckzn.co.za
navisha@apckzn.co.za
sales@apckzn.co.za

Reg No: 2019/549232/07

To Whom It may Concern

I , Shaun Kilroe grant permission to Anneen Aberdeen to conduct her research at Auto Paint Centre KZN – Pinetown.

Hope that the above is in order and if you need any more information, please do not hesitate to contact me on the below details.

Thanking you.

Yours sincerely

_____
Mr SG Kilroe
Manager
082 469 1061
031 054 5044

AUTO PAINT CENTRE KZN
(PTY) LTD
Unit 2, 152 Josiah Gumede Road
Pinetown, 3610
Vat No: 479 028 9088

Commercial
Vehicles

To Whom is may concern

I, Gary Gower Winter grant permission to Anneen Aberdeen
To conduct her research at Alpine Commercial Workshop
Pinetown.

Hope that the above is in order and if you need any more
information, please do not hesitate to contact me
on below details

Kind Regards

Your sincerely,

Mr G. Gower Winter
Service Manager
0317131200
0733468160

ALPINE
COMMERCIAL
2736

PINETOWN BRANCH

127 Josiah Gumede Rd

Pinetown 3610

Tel: 031 7091077

Fax: 031 7023517

Company Reg no: 2004/124385/23

To Whom it may concern

I Lance Massey grant permission to Anneen Aberdeen to conduct her research at Powerflow Exhausts Pinetown.

Please contact me for any further information.

Regards

L Massey

Owner

Appendix F: Interview answers

Company1

Medium/small enterprise, services cars, franchise, 10-20 employees, director conducted the interview

Question 1

a- Yes, the participant does find standard cost variance analysis relevant as it assists with pricing to engage with potential customers.

b- Considering the participant has numerous suppliers it is essential to compare prices with competitors, the participant labour rate has been set that this company is far cheaper than the agents.

c- Participant has benchmarked the labour rate against the agents.

Question 2

A- Essential as it is very easy to track profitability.

B- Constant monitoring of costing, approval process to authorize invoices.

C- Participant must do homework to make sure suppliers costing/pricing is still fair and competitive. Quality of service from suppliers must always be optimal to ensure customer satisfaction.

Question 3

a- Participant always places choices on cost in term of part selection whether to choose after market vs agents parts. Participant also manages wastes in terms of consumables for the company.

b- Reviewing budgets for different departments and accessing against losses.

c- Constantly comparing pricing i.e., shopping around to achieve best value for stock.

Company 2

Small medium enterprise, fixes exhaust on the cars and maintenance, small franchise, less than 10 employees, conducted the interview with the owner

Question 1

A- Participant said standard cost variance is relevant and it is there all the time unconsciously.

B- Participant says cost are changing all the time hence keeping up to date, depends on some stock varies weekly versus others that changes annually.

C- Relevance is in participants profit, there must change cost analysis to make standard profits.

Question 2

a- Participant said it is vitally important in daily operations.

b- Participant said nothing really as it is very unpredictable.

c- Participant said to be careful not to overspend on your budgets like expenditures. Question 3

a- Participant said it depends on how busy there are, as well as company's turnover.

b- Participant said it is important to evaluate profits to keep the company's doors running at a profitable rate.

c- Participant said there stay within budget depending on hour busy there are. No matter what costing systems there use if there do not breakeven the company will run at a loss therefore Standard costis vitally important.

Company3
Small enterprise, panel beater, less than 10 employees, conducted the interview with the owner

Question 1

A- Participant said currently the company is taking a strand due to cash flow as covid 19 has affected the company and load shedding, so the participant is having challenges to have a true standard cost variance analysis on the operations of the company.

B- Participant said there have cut costs by trimming staff, reducing employees' hours of work.

C- Participant said there would like insurance companies to supply all parts and there just charge for the labour.

Question 2

a- If the company does not control cost their loss site of profits, which could potentially lead to running at a loss.

b- Participant said due to covid 19 it is difficult to have a budget control and actualization in the organisation because the company is running on a day-to-day basis due to covid 19 and load shedding as load shedding affects the whole business i.e., machinery comes to a complete stand still.

c- No comment

Question 3

a- Participant said there must "Ban Restrictive Vehicles Service Plan", meaning to allow clients to take their cars to any repairer of their choice.

b- No comment.

c- Participant said there had to cut costs meaning shorter working hours, downsize shop size, shop around for cheaper suppliers, company said there are now charging a fee to do 3rd party's quotes where in the past that was not done.

Company 4
Big franchise, services cars, more than 50 employees, conducted the interview with cost accountant

Question 1

a- It is relevant in the sense that being a franchise our pricing includes costing which must be standardized through South Africa, because a lot of vehicles have service plans, pricing issued by the manufacturer is standardized across the country.

b- The participant said there just maintain policies and procedures implied by the head office. Participant said there cannot do their own thing there have to consult with higher management being head office.

c- Major clients because there are fleet owners (meaning owning more than 5 cars of the same name brand, usually companies), there are entailed to a fleet owner discount which is generally 10% on parts only.

Question2

a- Participant said it helps in pricing and budgets for each department.

b- Everything is computerized which comes from the manufacturer and labour is standardized.

c- No comment.

Question 3

a- Participant said there do not have control over the parts pricing, the manufacturer changes pricing electronically and happens over night with no further warnings.

b- Sadly, at the end of the end the customers suffers if there is a price increase, if it is too drastic management can offer a discount.

c- Participant said there must comply with the manufacturer costing otherwise there will lose their franchise.

Company 5
Small enterprise, repairs tyres and services vehicles, less than 10 employees, conducted interview with owner.

Question1

a- Participant said there are facing challenges because of imports, considering taking taking into account the fluctuation of the exchange rate and the instability of shipping costs. Therefore, the variance is constantly changing hence it is extremely challenging to manage costing.

b- So due to unforeseeable changes it is extremely challenging to plan because of stock and cost variances.

c- Participant said load shedding has impacted them quite a lot due to the unpredictable schedule which has a negative impact on idle time (wasted paid labour time).

Question2

a- Participant said it is standard cost variance analysis is not effective due to the fact their battle to buy stock and coupled with a full 8 hour working day. Standard costing has no use to this company.

b- Effectively if participant can get stock at the right buying levels participant over stocks and keeps the stock aside until needed.

c- No comment.

Question3

a- Whatever consumables are purchased the participant shops around for the best possible pricing in terms of variable overheads are constantly changing which is hard to plan especially with load shedding i.e., indirect labour, electricity, and idle time.

b- Participant said there is no fixed information as it varies all the time, because of the unforeseeable changes within shipping, load shedding etc it is difficult to have an effective costing system in place within the organization.

c- Participant has managed to stay within budget by managing short time of

staff when required and negotiating stable rental of premises.

Company 6

Franchise, services vehicles, between 40 to 50 employees, conducted the interview with the service manager.

Question 1

a- Participant indicated standard cost variance is relevant when comparing with non-franchise dealership to stay competitive in the market, with the right to repair.

b- Participant said it is more of a group thing (franchise) thing so there strategize as a franchise to ensure that all costs are standardized and competitive in the marketplace.

c- Standard costing in this franchise works because one can forecast daily, weekly, and monthly figures, so hence helps to stay within budget.

Question2

a- Participant said it is vitally important in their daily operations.

b- Participant said there have monthly meeting and other thing is there using the balance scorecard card to evaluate performance.

c- It is effective tool for daily operations.

Question3

a- Participant does a budget leading into each financial year, and this is made up of a 12-month period, between September and December is where a lot of decision making takes place. This can be extremely frustrating as this is not a true reflection on the previous years of trading.

b- It is effective, as it gives you a base to work with and to optimise profits.

c- Having a standardized cost allows their franchise to always stay within costs and you know how much you need to obtain in your budget.

Company 7
Franchise, tyres, and wheel alignment, less than 10 employees, conducted the interview with service manager.

Question 1

a- Participant said it helps to manage their costs. Helps speed up the process of ordering parts.

b- Participant said that there do market related research for their pricing to set prices that are reasonable for their customers

c- No comment.

Question2

a- Participant said it helps manage the cost control in their organization.
b- Participant has an annual budget that is broken up into monthly budgets

which allows participant to have credit limit and not to overspend.

c- No comment

Question 3

a- No comment.

b- Following through with budgets, where employees follow standards and meet the required target for the month.

c- It has a vital role in not allowing participant to overspend in budget control by keeping stock to a minimum and not having to lower cost to potential customers as stock would be too old.

Company 8
Franchise, services cars, plus minus 40 employees, conducted interview with the service manager.

Question1

a- Yes, the participant has said it is totally relevant, because of retail, warranty for customers.

b- It is predetermined by manufacturers and service providers.

c- Standard costing is vitally important to stay within budget as without following a budget the company would run at a loss.

Question2

a- Participant says yes as it assists with staying within budget and helps plan and foreseeable expenses.

b- Participant said their have monthly meetings with higher management to access budgets and stay within budgets.

c- It is an effective cost control tool as it helps with daily operations.

Question3

a- All is determined and provided by the service provider or manufacturers. b- It makes it easier as everything is predetermined using an internal online system. c- Participant said there follow set monthly targets that is determined by head office and have to meet the minimum targets.

Company 9

Small enterprise, repairs brakes and clutches, plus minus 30 employees, conducted the interview with the director.

Question1

a- Participant said there have more then one source, that allows participant to base price their services. Participant does use standard cost variance, but it is not the only source there use, as imports fluctuates and be hard to set a price.

b- Participant said there strategize day to day as there import their products and it is constantly changing because of the exchange rate. Participant also emphasises their job cost as jobs come in daily.

c- Basically, everything is costed to the current standard costing as mentioned because of the exchange rate.

Question2

a- Participant said their jobs are costed job by job hence there do not find standard cost variance to be an effective cost control tool.

b- Participant said there follow a standard mark up formula and that is stainable and effective profit margin.

c- No comment

Question3

a- Participant said decision making in cost control relates to keeping the doors open and keeping the employees in jobs.

b- The motor industry is heavily affected by standard cost variance prices because imported products are mainly used in the motor industry this relates to variances.

c- Participant said by using more than one supplier, which allows to compare prices which helps the participant to stay within budget.

Company 10
Small enterprise, paints cars, 20 employees, conducted interview with the director.

Question 1

a- Participant said there find standard cost variance relevant because it assists with the company's profitability.

b- Participant said there use sales Reps each sales Rep has their area which there look after, and participant said as a higher management their monitor petrol usage as it is there second major expanse.

c- Participant said that protest/ strikes of employees can affect costs within the organization as well as staff staying away because of covid 19.

Question2

a- Participant said if you can keep all your fixed costs in line the variable costs are the cost that their must work around. It is a necessity to use standard cost variance to control cost.

b- "Keeping performance indicates", are implemented to achieve profits margins, as well as weekly meetings to evaluate performance.

c- Participant said their cannot manage it if the measure it.

Question3

a- Participant said the return of sales has a big effect on the cost of the company.

b- Participant said to increase profitability to assess how effective cost control is in the organization.

c- Participant said there stay within budget by assessing their credit, should the participant go above budget there need to increase turnover to get the returns needed.

Company 11
Small enterprise, servicing and repairing cars, 10 employees, conducted interview with the owner

Question1

a- Participant said it is not relevant to their organization. Participant said there try to work with standard costing variance however it is difficult to work within standard costing variance due to the fact of different customers and their budgets.

b- There are no real strategies but working around the customers budget and requirement.

c- Basically, it boils down to customers budgets as this is the key factor as it sets the financial tone.

Question2

a- Participant said it is not effective at all.

b- Participant said there do not work on any specific strategies.

c- Participant works on their own strategies to suit the customer's budget.

Question3

a- Participant emphasizes the point on how important it is to work around customers requirement and budget which in turns gives them confidence and trust in their organization, without compromising the quality of workman ship.

b- In this organization it has not been very effective at all as it is a private entity, the company can offer different price options to suit customers budget without dropping standards.

c- If the participant had to work on standard costing variance the company would not survive. As the company was started from scratch and as the company has grown different strategies have been applied to keep the daily operations flowing.

turnitin

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This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

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Effectiveness of Standard cost as a cost control tool in the automobile industry in Durban, KwaZulu-Natal, South Africa

By

ANNEEN IRENE ABERDEEN

A RESEARCH THESIS SUBMITTED IN FULLPARTIAL EXECUTION OF THE REQUIREMENT FOR THE AWARD OF THE MASTER OF ACCOUNTING (COST AND MANAGEMENT ACCOUNTING) DEGREE, DURBAN UNIVERSITY OF TECHNOLOGY

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