AKENTEN APPIAH-MENKA UNIVERSITY OF SKILLS TRAINING AND ENTREPRENEURIAL DEVELOPMENT

STRATEGIC MANAGEMENT ACCOUNTING PRACTICES AND DECISION MAKING OF MANUFACTURING COMPANIES IN GHANA

ISAAC BURNS

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A Thesis submitted to the Department of Accounting Studies Education, Faculty of Business Education, School of Graduate Studies, Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development, in partial Fulfilment of the Requirements for the Award of a Master of Philosophy Degree in Accounting

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DECLARATION

STUDENT'S DECLARATION

I, **Isaac Burns,** hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree at this university or elsewhere.

Signature: …….. Date: ……

SUPERVISORS' DECLARATION

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development.

Supervisor's Name: **PROF. JOSEPH MBAWUNI**

Signature: ……..……. Date: ……....

DEDICATION

This work is dedicated to my wife-Mavis Stephanie Owusu and children (Michael Fiifi Burns, Ewurama Sam Burns and Beverlyn Ohema Achiaa Burns).

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

The study evaluated Ghanaian manufacturing organizations' strategic management accounting, and decision-making processes. The study uses survey and cross-sectional research design and is quantitative and non-experimental. The population of Ghana was created by manufacturing firms. The data collection tool was a structured questionnaire. 250 respondents were chosen using a straightforward random selection procedure. The analysis method that was employed was structural equation modeling. According to the study, balanced scorecards have a very favourable impact on Ghanaian manufacturing companies' decision-making processes. It was identified that target costing had statistically significant positive effect on decision making among manufacturing firms in Ghana. The effect of just-in-time system on decision making within the manufacturing companies in Ghana was found to be positive and significant. The study recommends management of firms should utilize the contemporary management accounting practices in decision making. This calls for management to establish management accounting functions with experienced and qualified management accountants to support decision making. In light of this, management should provide adequate management accounting system to support the efficient and effective delivery of management accounting functions. In order to maintain their professional competence and due care, management accountants should participate in CPD programs offered by organizations like the Chartered Institute of Management Accountants and the Institute of Chartered Accountants.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The corporate environment is constantly evolving. Therefore, managers in manufacturing companies devise strategies to deal with the intense competition. Making decisions consequently becomes essential to a company's survival. In the past, standard management accounting technologies have been used to give management timely, accurate information for decision-making (Jbarah, 2018). Modern management accounting systems were introduced as a result of the previous management accounting methods becoming obsolete in order to keep up with the advancement of contemporary management methods (Jbarah, 2018). Many management accounting techniques emerged as a result of the growing development in contemporary management accounting systems, signifying a real advancement and a method for the precise calculation of product costs (Al-Nashar, 2016).

Due to that, organizations are open to altering their policies so as to switch from conventional management accounting techniques to modern ones. The majority of the administrative actions required by this transition must be conducted after measurement and assessment (Jbarah, 2018). The tasks of the management accountant have also been enhanced by the expansion of the business sector, which has led to a variety of undertakings or processes used by entities and a multiplicity of the goods or services it produces or offers. Comprehensive administrative functions like planning, directing, organizing, controlling, and decision-making were made possible by this movement. Modern administrative strategies and processes are now used as a result, allowing businesses to evaluate how effectively they are utilizing their resources to produce the

desired results. This is possible by using information strategies that assist in the pursuit for the best least expensive alternative (Fakhre & Al-Dulaimi, 2012). Sound information results in the best decisions. The position of the management accountant has lately come to light as businesses look to increase the superiority of their outcomes (Zaher, 2016).

To assist management in creating and implementing an organization's strategy, management accountants offer their experience in financial reporting and control, help in designing planning and performance management systems, and ease management decision-making (Chartered Institute of Management Accountants, 2008). According to Taipaleenmaki and Ikaheimo (2019), old management accounting concentrated on cost control and cost reduction, but modern management accounting prioritizes customer happiness. The analytical frameworks for efficient managerial decision-making are also refined by modern management accounting. These analytical models help businesses make wise decisions by enabling them to assess the effective use of resources to attain desired organizational aims.

The management decision-making processes are facilitated and sped up by such analytical tools, such as activity-based costing, standard costing, activity management, and activity-based management, balanced scorecard, life cycle costing, and target costing (Björnenak & Olson, 2019). Because of this, the most frequently used management accounting practices for supplying pertinent information to management for decision-making were shareholder value analysis, activity-cost-management, life cycle costing, target costing, commercial value-added, value-based management, and balanced scorecard (Chenhall & Euske, 2018).

The term SMA was developed with a variety of solutions to address these issues as a result of the change in the corporate environment in the 1980s, which generated concerns about the usefulness of traditional management accounting. The use of technology in business and decision-making has further hastened the development of management accounting solutions. Several incentive factors contribute to the use of SMA tools by companies. The main reasons why firms embrace SMA technologies are to examine competition data, decision-support tools, simplicity of product life cycle management and cost control, advancement of SMA through artificial intelligence (AI) and big data analysis, and improved company performance. In 1982, Simmonds coined the phrase strategic management accounting (SMA).

In order to develop and implement business strategy, he defined SMA as instruments that support the provision and analysis of management accounting data about a company and its competitors. A corporation can adopt a strategic mentality through the combination of marketing management and management accounting (Roslender & Hart in 2003). Furthermore, SMA is defined by Marlina and Tjahjadi (2020a) as providing and analyzing financial information on product costs in the market and competitors' cost structure and monitoring company strategy. SMA differs from other conventional management accounting systems, according to Bromwich and Bhimani (1994), in that it has an external orientation.

SMA is a phrase used to characterize a set of tactics, methods, tools, and software that are necessary for assessing competitive data and creating realistic, feasible strategies, according to Abdullah et al. (2020). Simmonds (1982), refer to as the father of SMA, highlighted that for a corporation to succeed, it must have the right market positioning and competitive advantages. This is crucial, according to Simmonds, who was quoted.

SMA, according to Roslender and Hart (2003), has a longer time horizon than typical management accounting and a larger perspective of an organization and its operations. Numerous SMA practices have been identified via various studies. Twelve SMA methods were identified by Guilding et al. (2000). These methods included value chain costing, competitive position monitoring, quality costing, life cycle costing, and strategic costing. They also contained competitor evaluations based on publicly available financial filings and competitor cost assessments. These were selected based on the future, marketing, and competition attention emphasis areas.

Cadez and Guilding (2008) divided the sixteen best SMA tools they found in their investigation into five categories: strategic decision making, competition accounting, customer accounting, planning, control, and performance measurement. SMA is frequently included in higher level business and accounting courses due to the necessity of SMA knowledge.

Simmonds and Bromwich, two leading academics, put the SMA theory into the literature more than 20 years ago. SMA gained notoriety during this time as one of the cutting-edge methods used to revive the management accounting practices' waning relevance (AlMaryani & Sadik, 2012; Juras, 2014; Tillmann, 2003). Simmonds initially introduced the word "SMA" to denote an externally focused method of management accounting practice in the 1980s (Roslender & Hart, 2010).

Accordingly, SMA is a major divergence from standard management accounting practice in favor of a dynamic and strategic orientation, as emphasized by Cadez and Guilding (2007) and Juras (2014). The hierarchy of management accounting procedures that SMA provides is sophisticated and broad (Bromwich 1990).

According to published research, SMA is equally an extension and a unique orientation that offers a full external perspective to management accounting practice, moving it away from its antiquated legacy and toward a strategic innovation that deviates from the standard (Drury, 2002; Juras, 2014). SMA, by itself, includes a larger focus and a longer-term perspective than the majority of management accounting. A methodology that straddles the line between accounting and strategic management (Roslender & Hart, 2003, 2010; Juras, 2014). The Simmonds' description of SMA has currently gained widespread acceptance in the literature.

Additionally, it has drawn a variety of opinions from academics and professionals. 'External' in Cinquini and Tenucci (2007) is a phrase for 'competitors.' Simmonds' (1981) concept of communicating with opponents on the outside was predicated on the notion that firms would create and track new business strategies in order to comprehend competition information.

According to Shank and Govindarajan (1993), the term "external" also refers to suppliers and customers in the sense that it emphasizes the usefulness of external information in assisting businesses in exploring beneficial relationships with these parties. Similar to and more specifically, the term "external" refers to the market, where products produced to meet customer wants are appropriately considered while being mindful of the expenses associated with those attributes (Roslender & Hart, 2003).

SMA can be interpreted and convinced in a multitude of ways, both in the literature and in actual investigations, depending on the researcher's scientific background, underlying assumptions, and beginning points (Juras, 2014). SMA was defined as a broad technique of accounting for strategic positioning by Roslender and Hart (2003,

2010), who aimed to merge management accounting and marketing management insights into a framework for strategic management. Experts claim that although if the phrase "strategic management accounting" was coined in a novel method, there is now little to no agreement on its precise definition (Drury, 2002; Juras, 2014; Roslender & Hart, 2010). While it is generally accepted (Roslender and Hart, 2010) that SMA refers to a fundamental method of accounting for strategic positioning, this just begs the question of precisely what the term "SMA" signifies. This is the reason why there isn't a clear framework for SMA (Cinquini (2007), Juras (2014), Roslender and Hart (2010)).

Since SMA adoption and implementation as part of management accounting procedures was first addressed in the literature, scholars and practitioners have raised issues about its applicability (Juras, 2014; Roslender & Hart, 2010). There has also been relatively little scholarly focus on the possibility of SMA practices in businesses (Cadez & Guilding, 2007; Juras, 2014). Furthermore, among the few empirical research on SMA that are now available, very little data supports its application in cutting-edge companies in the developed nation of the United Kingdom (Roslender & Hart, 2003). The majority of studies focused on SMA practices in wealthy nations, with little to no research having been done on the data from developing nations. However, neither the extent of SMA nor its distinctions from conventional management accounting methods have been well defined (Drury, 2002; Roslender & Hart, 2003, 2010). Some scholars claim that SMA is still only an academic theory that hasn't been proven in any real-world setting (Alnawaiseh, 2013; Juras, 2014).

This study tries to look into the viability of SMA adoption in Nigerian banks, which is a developing nation. More precisely, it examines whether Nigerian banks use SMA and the benefits SMA brings to the sector. The Nigerian banking sector has a history of

instability, largely as a result of subpar management and dishonest business practices. It is heavily regulated, and frequently political maneuvers and governmental policies cause abrupt disruptions in its management lapse and operations, leading to a inconsistent change and dissolution from traditional banking rules (Adeyemi, 2011; Sanusi, 2010). These typically put the banks under pressure to remain viable and profitable. Similar to this, it is crucial for banks in Nigeria and other African countries to develop strategies for viable expansion due to the falling price of oil, the ongoing depreciation of the currency of Nigerian, and the downturn of the economy. Adopting and using SMA will, therefore, not only speed up industry growth and stability, but will also secure strategic positioning for sustainability.

1.2 Problem Statement

Traditional management accounting methods like cost volume profit analysis, marginal costing, absorption costing, budgeting and budgetary control, standard costing and variance analysis, and other methods have been criticized in the past as being insufficient to provide current management with significant data for decision-making (Bromwich & Bhimani, 2020; Lucas, 2019). This is owing to the fact that businesses nowadays face rapid technological change and shorter product life cycles as a result of intense rivalry, and traditional management accounting procedures are insufficient to keep up with these advancements (Drury et al., 2020; Hilton, 2018). To compete in the current active business environment, it is imperative that firms incorporate their approaches to quality enhancement, increased adaptability in meeting specific customer needs, reduced lead times, inventory, and production expenses (Lucas, 2019). These goals can be effectively achieved by applying modern management accounting practices including target costing, business process re-engineering, activity-based costing, just-in-time system, and comprehensive quality management.

Despite the significance of the contemporary management accounting techniques, it is still not clear on how they influence decision making. The next chapter expands on these existing studies to support the development of the theory in order to give more specifics. Considering the strategic management accounting, and decision-making processes of a few Ghanaian manufacturing enterprises is the goal of the current study because of this.

1.3 Purpose of the Study

This study's primary objective is to evaluate how strategic management accounting procedures affect Ghanaian manufacturing enterprises' decision-making. Specifically the objectives are to;

i. Examine the effect of balanced scorecard approach on decision making of manufacturing firms in Ghana.
ii. Examine the impact of target costing on decision making of manufacturing firms in Ghana.
iii. Investigate the effect of just-in-time system on decision making of manufacturing companies in Ghana.

1.4 Research Questions

The queries below were posed in order to fulfill the above-mentioned study goals:

i. What is the effect of balanced scorecard approach on decision making of manufacturing companies in Ghana?
ii. What is the impact of target costing on decision making of manufacturing companies in Ghana?
iii. What is the the effect of just-in-time system on decision making of manufacturing businesses in Ghana?

1.5 Significance of the Study

This current study has consequences for practice in addition to theory and literature. The current study advances theoretical understanding of modern strategic management accounting methods in the context of Ghanaian manufacturing firms. The study's findings will provide some significant insights that are important for decision-makers, including management of manufacturing businesses and other organizations, nations, authors, and academics. The current study also sheds light on some well-known strategic management accounting methods, such as the balanced scorecard, target costing, just-in-time system, value chain analysis, and benchmarking, and how they affect decision-making in Manufacturing companies and other organizations. Academics and authors can use the current study as empirical evidence and a point of reference for their other, related studies. It also adds to academic and author research that examine strategic management accounting procedures, decision-making, and their interactions.

1.6 Scope of the Study

The study focused on manufacturing firms in Ghana, but not all manufacturing companies were included in the study. The contextual and geographic scope of the study was the manufacturing firms in Ashanti and Greater Accra Regions. This is justified by the fact that these regions are the two most populated regions as revealed by the 2021 Population and Housing Census of Ghana. The study therefore contends that majority of manufacturing companies into different activities can be located in these regions. In terms of the conceptual scope, the study focused on balanced scorecard, target costing, just-in-time system, value chain analysis, benchmarking and decision making.

1.7 Limitations of the Study

The scope and methodology of this study have some constraints, starting with data access for the analysis. Getting data from participants is usually a challenge, as they are quite skeptical about giving out information to researchers. However, in the course of this study, the researcher explained to the respondents, the essence, nature and the methodologies employed in the study and that the findings from this study was to be used for academic purpose only, he also assured the respondents of an outmost confidentiality with regards to any information they will divulge for the purpose of the study. This increased respondents' confidence in the fact that the study is purely an academic exercise, and not to indict any staff. Secondly, time constraint, however, compelled the study to be limited to 2 out of the 16 regions in Ghana.

1.8 Organisation of the Study

The study is split into five separate but related sections. In Chapter One's introduction, it is important to highlight the study's history, research challenge, objectives, and research questions, significance of the study, scope, limits, and organizational structure. The second chapter reviews the relevant literature in relation to conceptual, theoretical, empirical, and conceptual framework reviews. The research approach used to accomplish the research objectives is examined in Chapter 3. It comprises the study site, demographic, sample size, sampling method, data source, and methods used to collect the data. The data acquired are analyzed in Chapter 4, Data Analysis and Presentation of Results, and the analysis's findings are covered. Finally, Chapter Five summarizes the results from Chapter 4 and draws conclusions before offering some managerial and scholarly advice.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The study's goal is to look into the strategic management accounting practices and decision-making procedures of Ghanaian manufacturing businesses. The conceptual review, theoretical review, empirical review, and conceptual framework are all covered in this chapter. The review is being conducted in compliance with the study's goals, which include determining how Ghanaian manufacturing firms make decisions in relation to the just-in-time system, target costing, and balanced scorecard approach.

2.1 Conceptual Literature Review

A review of pertinent and related literature was conducted in order to accomplish the precise goals stated in chapter 1 of this thesis. The literature on strategic management accounting practices, such as the balanced scorecard, target costing, just-in-time system, activity-based costing, benchmarking, and decision-making, is presented in this section of the thesis.

2.1.1 Strategic Management Accounting Practices

Because of various economic, political, legal, and social variables, management accounting has gone through many stages of growth. Its beginnings can be traced to the 19th century, when management required knowledge of the costs in the spinning and weaving, iron and steel, and other large-scale manufacturing industries (Jbarah, 2018). In order to contribute to a more accurate determination of the cost of stocks, the focus was first primarily on cost and labor before being expanded to incorporate the additional expenses of items (Joudeh et al., 2021). An impressive function for management

accounting is played in the various facets of economic life. It must adapt to the continuously changing needs of management and societal requirements. Since accounting is a byproduct of economic needs, it had to take into account the new era and massive information explosion that the 21st century is experiencing. This revolution produced a vast number of units with a variety of activities, from which giant multinational corporations that produce a variety of hi-technological goods and services have emerged (Al-Nashar, 2014).

To solve the issues that businesses confront during decision-making, the management accountant must acquire a set of knowledge and abilities as well as be aware of creative and thinking processes (Taipaleenmaki & Ikaheimo, 2019). It will be difficult for management accountants who can't adjust to these developments to compete in this developing field. They won't be able to offer high-caliber professional services, which will put them at risk and make it difficult for them to maintain their positions (Ali, 2016). Five management accounting techniques were employed in this study: the balanced scorecard, target costing, just-in-time production system, value chain analysis, and benchmarking.

Because of highly publicized condemnations of conventional management accounting practice (MAP), which were mostly internal-focused and not strategically oriented, the vast interest and diverse study in strategic management accounting (SMA) began. There is no agreement on the concept of SMA according to the accounting literature that has been evaluated from 1982 to 2022 (Langfield-Smith & Parker, 2008). According to Coad (1996), there is a strong and expanding interest in the area of SMA among scholars, but there is no consensus on the specifics of the field's qualities or how it might develop in the future.

Similar to this, Nguyen and Nguyen (2021) assert that despite Simmonds (1982) being the first to adopt the term "strategic management accounting," there is still disagreement about what it exactly implies. Due to this, every scholar's definition of SMA is unique and based on their own experiences. In spite of this, the majority of research consistently point out three traits that SMA shares: an emphasis on the external environment, the analysis of both financial and non-financial data, and a long-term view.

Simmonds (1982) defined SMA as the dissemination and analysis of management accounting data about a company and its rivals that may be used for the oversight and formulation of business strategy. He emphasized that management accountants might be more involved in competitive analysis, which is more externally focused than their current position, which is more inwardly focused. Several scholars, including Parker (2008), have tried to define SMA differently in the past based on their own personal opinions. Nguyen and Nguyen (2021) condensed these concepts into three key elements: All decisions made in light of financial and nonfinancial facts are long-term in nature and are centered on factors outside the company.

According to Guilding et al. (2000), SMA is taking strategic orientation to the generation, interpretation, and analysis of management accounting information and competitor activities. SMA, according to Ma and Tayles' definition from 2009, is "the body of management accounting concerned with strategically oriented information for decision making and control. As a result, SMA combines the management accounting technique with an explicit external focus and a clear strategic focus, producing the concept of SMA's core.

According to Bhimani and Langfield-Smith (2007), SMA also makes considerable use of non-financial measures. More specific definitions of the external orientation characteristics are required, including identification of the external parties affected by the employed SMA approaches and the ways in which these techniques can assist both internal and external stakeholders. Then more companies will start using SMA strategies to boost their operational efficiency.

According to Bromwich (1990), SMA involves monitoring the company's and its competitors' strategies in various markets across a number of accounting periods, as well as providing and analyzing financial data on the firm's products, markets, and competitors' expenses and cost structures. Bromwich also emphasized the requirement for longer-term management accounting data and the inclusion of external stakeholders like as customers (markets) in all external studies. Traditional management accounting methods, according to Guilding et al. (2000), assume a one-year time frame and a short-term perspective with an internal focus. All of these traits indicate a lack of strategic orientation. A long-term future orientation timeline and externally directed viewpoints are implied by strategy. These differences between the characteristics of MAP and strategy assisted in identifying which accounting techniques are included in SMA. Although the body of literature on SMA research has grown, the field is still poorly defined, and there is no widely acknowledged SMA framework, therefore it is preferable to think of SMA as a general method of accounting for strategic posture.

According to Roslender and Hart (2003), SMA is thought to combine concepts from strategic management with those from other management disciplines. Studies should be conducted to determine whether the SMA concept can be integrated with ideas from other business disciplines such as human resource and management accounting outside

marketing management. Traditional management accounting procedures were in use prior to Simmond and Bromwich's introduction of SMA in the literature (Drury, 2002). Some of the newly developed methods during this time seemed promise, both for management accounting and accounting in general. SMA sprang to prominence as a result of this stimulation (Roslender, 1995; Roslender & Hart, 2003). Attribute costing, target costing, bench marking, activity-based costing, strategic cost analysis, value chain costing, and others were some of the methodologies that were then adopted (Ajibolade, 2010; Drury, 2002; Roslender & Hart, 2003, 2010). Although management accountants employ these methods on their own, some academics have argued that taken together, they form the SMA methodology as a concept (Roslender & Hart, 2010).

As stated by Bromwich (1990), SMA is marketed as a more involved order of management accounting techniques and an externally focused approach. Tillmann (2003) asserts that SMA has a broad external emphasis that includes both competitors and the competitive environment. By integrating management, accounting, and marketing within a strategic management framework, it considerably veers away from the conventional practice of management accounting (Drury, 2002; Roslender & Hart, 2003, 2010).

Simmonds advocated for an alternate management accounting technique in his SMA A submissions. Cost-control strategy that moves beyond customary internal practices and adopts a competitive and market-wide strategic framework. SMA, as defined by Tillmann (2003), is the use of management accounting systems to assist in making strategic decisions. He clarified this by saying that a management accounting role that

enables the appropriate measure of strategic scenarios may play a role in a company's ability to survive in fiercely competitive global markets. Actually, Simmonds had this in mind when he advocated for a more advanced management accounting method to direct businesses toward innovations and competitive advantage. Although there are many different opinions regarding the external orientation of SMA, Simmonds and Bromwich's viewpoints on SMA were adopted by the CIMA, a leading management accounting organization. According to Okoye and Akenbor (2008), SMA is a subset of management accounting where the focus is on data created internally as well as non-financial data and factors outside the organization (ICAN, 2010b).

For everyone involved in the practice of accounting, studies on SMA continue to present a wide range of difficulties in the literature. Simmonds first pushed them to go beyond the box and into the complementary realms of marketing and strategy. In other words, consider SMA to be focused with fusing important features of managerial accounting and marketing administration. In order to achieve inter-functional cooperation, management accountants must finally set aside jurisdictional differences with their marketing function colleagues (Roslender & Hart, 2010). Cravens and Guilding (2001) integrated a number of existing management accounting methodologies to model SMA in their study. They held the opinion that SMA is merely a rebranded amalgamation of previously used concepts and approaches rather than a completely new idea or approach. Life cycle costing is a component of SMA, which is the first point to be considered while evaluating Cravens and Guilding's (2001) submission.

Life cycle costing, according to Drury (2002), calculates and accumulates costs throughout a product's whole life cycle. Management is able to comprehend the financial ramifications of the total expenses incurred across a product's life cycle, from design to decline, via introduction, growth, and maturity, by recognizing these costs at various times of the product's life cycle. Life cycle costing has a strong market orientation and long-term accounting perspective, according to Cravens and Guilding (2001), which is compatible with the market emphasis of SMA in Simmonds (1981) and Bromwich (1990) arguments. In other words, attribute costing views goods and services as a collection of attributes that set them apart and affect how much they cost. Because service qualities are chosen in accordance with client needs, this technique is occasionally seen as being externally oriented in line with Simmonds' theory of SMA (Cravens & Guilding, 2001; Cinquini & Tenucci, 2007; Juras, 2014).

Target costing is a customer-focused method that is widely utilized by many businesses in the US, Europe and Asia, according to Drury (2002). He noted that target costing requires figuring out how much buyers think their purchase is worth based on its features and benefits. This method also simulates Simmonds and Bromwich's external orientation theory for SMA (Cravens & Guilding, 2001; Juras, 2014; Roslender & Hart, 2003). According to Roslender and Hart (2003), who cited Bromwich (1991), the core of Bromwich's SMA approach is the attribute costing technique, which is predicated on a strategic cost analysis matrix. Similar to SMA, target costing is said to put a significant external focus on consumers, the market, and rivals (Drury, 2002; Roslender & Hart, 2003).

Benchmarking is another SMA strategy, according to Cravens and Guilding (2001), and it entails determining the best practices and contrasting an organization's performance with that of competitors with the aim of improving. This tactic highlights the strategic outward orientation toward rivals a phrase coined by Simmonds (1981) based on the notion that companies should create and keep track of new business strategies in order to comprehend information about their rivals. According to Drury (2002), this technique seeks to identify processes like processing customer orders that could need better and makes sure such processes are improved. Activity based costing (ABC), this is part of the SMA strategy and involves managing activities that allow actions to be defined with the goal of gaining a competitive advantage, as further emphasized by Cravens and Guilding (2001).

According to Drury (2002), Johnson proposed more than 20 years ago that knowing costs by activity is the catalyst that eventually ignites the necessary action to become competitive. This concept was elaborated by Simmonds (1981) in his research on SMA; the goal of this approach is to allow for the satisfaction of customer needs and wants while putting less strain on the resources of the business.

Similar to this, Cravens and Guilding (2001) emphasized value chain costing and strategic costing analysis as SMA approach components. Since each of these strategies was created and is capable of functioning independently, Cravens and Guilding (2001) compacted them into a single SMA technique. In comparison to Simmonds' initial interpretation of the term "SMA," this unified viewpoint differs substantially. A dynamic management accounting system, as envisioned by Simmonds (1981), is fully externally oriented toward a strategic aspect that is connected to non-financial and

financial data about customers, competitors, and the market environment. According to Simmonds (1981), management accountants should use SMA since it is a singular and comprehensive technique that stands on its own. It provides a foundation for actions that would improve or favourably affect the performance of enterprises by giving them a competitive edge over rivals (Aziz, 2012).

Simmonds' early ideas for comprehending SMA centered on the idea that, to assist a business in achieving its goals and objectives, strategic management entails creating and executing plans. This procedure may involve developing a plan of action, allocating resources and organizing organizational structure, managing procedures and assets, and spearheading change projects. Simmonds was motivated by this issue to combine management accounting with strategy to create a novel idea known as strategic management accounting (Cinquini & Tenucci, 2007; Juras, 2014; Roslender & Hart, 2010).

A number of authors examine Simmonds' concept of SMA as an external approach to management accounting practice. It has to do with other industry players, clients, and the conditions at the market. Simmonds (1981) emphasized that when these businesses are well-equipped with such external information, they may develop beneficial relationships with suppliers and customers. Simmonds also pointed out that businesses build and monitor new business strategies in order to get knowledge about their rivals. In developing this argument, Bromwich (1990) set SMA apart by highlighting the availability of information necessary to assess a firm's competitive position in an industry (Juras, 2014). He achieved this by carefully recognizing the expenses of the product attribute costs and connecting SMA to the market and consumers' pleasure.

Academics and practitioners have worked to comprehend and explain what SMA signifies as a concept and as a distinct management accounting technique in light of Simmonds (1981) and Bromwich (1990)'s perspectives on the matter (Juras, 2014; Roslender & Hart, 2010). Scholars have significantly broadened the scope of SMA in the literature and in practical research by contrasting its conceptual orientation with traditional and alternative management accounting methodologies. Some academics continue to insist, meanwhile, that SMA is only a synthesis of management accounting methods now in use. Roslender and Hart (2010) and Juras (2014) claim that this combined position, which is described as an effort to incorporate management accounting and marketing management insights into a framework for strategic management, is incorrect with the benefit of hindsight because it significantly departs from the promoters' submissions.

2.1.1.1 Balanced Scorecard

A performance indicator for strategic management, the balanced scorecard (BSC) is used to detect and improve various internal business operations as well as the ensuing external outcomes. Businesses in the US, UK, Japan, and Europe frequently use balanced scorecards as a tool for measuring and giving feedback to their enterprises. Although data is gathered and analyzed by managers and executives, data collection is necessary to get quantitative results. Employees can use this information to make better judgments regarding their organizations' futures (Theresa et al., 2020). Because it takes into account four factors in addition to the financial perspective which is insufficient to provide a complete picture of the business, this card serves as both an assessment and a strategy tool (Horngren, 2021). Four axes are also used in this card to assess the organization's performance. These axes are the financial, internal operational,

customer, and innovation and learning axes. According to Kaplan and Norton (2005), the balanced scorecard is "a tool that presents a sound set of ideas and principles in addition to a comprehensive course for the company to follow and converts the company's mission and strategy into goals and measurements." Task completion, work strategy setup, work strategy integration, and performance coordination between the individual and the organization are all aided by these measurements. Jbarah (2018) asserts that organizations can collect feedback on the status of external outcomes and internal business processes with a balanced scorecard, which enables leaders to improve performance and produce better business results. In Six Sigma and quality management, this strategic management performance indicator has long been a crucial tool and is still in use today.

2.1.1.2 Target Costing

It is determining a product's target cost and then attempting to meet it through design, manufacturing, and other procedures while preserving the required caliber and profitability. Businesses utilize target costing, a cost management strategy, to ascertain the ideal price for a product based on consumer expectations and market conditions, it is one of the cost management techniques that reduces total production costs with the assistance of the manufacturing and engineering design departments (Sakurai, 2021). The target costing system, according to Kato (2020), is one of the strategic strategies that reduces a product's production costs over the course of its life cycle. It denotes a series of actions taken during the planning and development stages with the goal of reducing the life-cycle costs of high-quality products while also meeting consumer needs.

Target costing, which is planned and employed in the early stages of a product's design and influences the production process in accordance with market expectations, is also known as management costing. It involves a collection of tasks that may be organized and determined to be completed at the required costing level, and it is frequently broken down into stages to make it easier to meet the management's set financial goals (Yoshikawa, 2019). Target costing is a management strategy that uses data and information to develop and achieve the product's target costing through a systematic series of activities (Jbarah, 2018). It handles the coordination and administration of all project phases, including planning, designing, production, and control (Jbarah, 2018). It is one of the most effective and thorough costing approaches.

2.1.1.3 Just-in-time Production System (JIT)

In order to reduce production costs, increase output, and promptly satisfy customer needs with the necessary quantities, a just-in-time production system uses technology to eliminate all sorts of stock and restrict waste during the purchasing and manufacturing processes (Al-Bishtawi & Al-Matarneh 2019). According to Schroeder (2020), JIT manufacturing, also referred to as lean production, also known as lean manufacturing, goes against conventional industrial knowledge. JIT procedures put more of an emphasis on manufacturing precisely the quantity you require at precisely the moment your clients require it than on making things and supplying them from inventory. JIT, according to Adeyemi (2021), is a comprehensive tactical approach that encompasses the basic tactical elements, such as JIT purchasing and JIT production, in order to cut waste and maximize resource utilization along the entire preparation chain. The just-in-time manufacturing system's guiding principle is to present innovative production ideas and techniques that effectively aid in obtaining a competitive position

among other organizations. It is also a management technique which links supplier orders for raw materials directly to production schedules. This inventory method lowers inventory costs for businesses by allowing them to receive commodities only when needed for production, thereby increasing efficiency and reducing waste. Producers using this strategy must precisely forecast on demand (Jbarah, 2018). The strength of this system is seen in the way that it challenges dominant ideas and ideals by exposing various flaws in conventional administrative structures (Jbarah, 2018).

2.1.1.4 Activity-Based Costing (ABC)

Practitioners are becoming more interested in ABC as a technique to assist distribute overheads more precisely (Jbarah, 2018). The need for more precise overhead allocation is important since it is common for difficulties and errors to continue when valuing is based on wrong cost data. By identifying all the work activities and costs involved in producing the product, it is also claimed that ABC overcomes the shortcomings of traditional costing (Jbarah, 2018). The standard accounting method, known as absorption costing, which bases cost allocation on labor hours or machine usage, rarely accurately depicts the underlying cause and effect relationship between indirect costs and particular products. According to recent polls, ABC is being used more frequently overall, but especially by Western businesses (Scapens, 2019). According to others, this tendency may have been influenced by the falling cost of computer power (Filman, 2020) and the complementary ABC software for business resource planning. More importantly, ABC helps businesses better comprehend their operations (Ghosh & Chan, 1996).

2.1.1.5 Benchmarking

Benchmarking is the process of measuring, comparing, identifying best practices, putting them into practice, and improving (Jbarah, 2018). One of the definitions of benchmarking that is most frequently used is that it is the process of looking for the best business practices and putting those principles into practice in order to achieve exceptional performance (Camp, 1989). To increase an organization's productivity, it is the process of finding, understanding, and putting into practice outstanding business practices from around the globe. Before evaluating actual business operations against those goals, it is a procedure that looks for best practices and high performance outside the company (Kumar et al., 2020). The focus of current benchmarking literature is on topics related to improving the benchmarking process, i.e., it is on thorough benchmarking research to identify the gaps (Jbarah, 2018).

2.1.2 Decision-Making

To achieve their corporate goals, businesses make a variety of decisions. Investment decisions are one of the important ones. The soundness and appropriateness of the investment decision determine the outcome of the investment process. Due to their permanent responsibilities that cannot be changed or canceled, this type of decision has various characteristics that make it more significant (Jbarah, 2018). As a result, the investment project's ability to succeed depends on the initial investment choices made (Abu Jalil & Akel, 2021). According to Kuaider (2018), an investment decision is one that specifies how much money should be allocated both now and in the future in order to generate returns, and that decision is subject to varying degrees of risk.

Due to the significance of the choice and comprehension of the concept, Abu Khashabeh, (2019) asserts that the investment decision comprises the following: the choice to allocate funds to investment projects that generate new production capacity; the choice to expand ongoing projects in order to boost the project's current production capacity; and the choice to maintain or increase the project's current production capacity in order to renew. Investment decisions are linked to making assessments of long-term capitalistic investments that build new production capacity and span out over protracted periods of time in the future (Jbarah, 2018). The majority of investment projects last for a long time, and since the future is unpredictable, the success or failure of such decisions depends on how accurately the future can be predicted, particularly with regard to the sales component, which serves as the cornerstone of investment decisions (Salem, 2021).

2.1.2.1. Strategic costing (Strategic Cost Management)

Strategic Cost Management (SCM) is another name for the strategic costing methodology. With the use of cost data, this technique will evaluate the financial effects of alternative managerial choices in order to develop improved business plans that will provide the company a significant competitive edge. By considering strategic management concepts (such as the value chain) and marketing ideas (such as product positioning) to be the most important in strategic decision-making, this approach prioritizes current and upcoming external challenges. Cost information derived from marketing and strategic data is utilized to develop and identify winning strategies that will provide the business with a long-term competitive edge (Cadez & Guilding, 2008). In order to make strategic decisions with an external and future perspective, this technique leverages cost data. This strategy is time-consuming and expensive, but when applied correctly, it can offer the business substantial advantages.

2.1.2.2. Strategic Pricing

Simmonds (1982) provides a case study to show how traditional approaches to pricing, which focus on internal factors and historically based analysis, can produce less-than-ideal results. He feels that information on potential competitor responses to every proposed change in price policy should be added to the data used to make pricing decisions. This strategy will demand more resources, which may be scarce in some businesses, because it is more outside focused.

2.1.2.3. Brand valuation (brand value budgeting and brand monitoring)

A formal calculation of brand value accounting might emphasize this method's future and long-term orientation, which might reinforce the notion that brand-related costs should be viewed as investments rather than expenses (Cadez & Guilding, 2007). Brand value, in accordance with a different study by Cadez and Guilding (2008), is the monetary evaluation of a brand based on elements like stability, market leadership, internationality, trend, support, and protection, as well as brand profits in the past. In reality, many businesses do try to assign a value to their brand, but in order for customers to stick with them, this must be reevaluated on a regular basis.

2.2 Theoretical Review

2.2.1 Agency Theory

Jensen and Meckling introduced the agency hypothesis in 1976. They looked into how people or groups shared risks, and they discovered that most risk-sharing issues result from the different attitudes that cooperating parties have regarding risk. The agency dilemma, which arises when people or organizations have diverse intentions and attitudes toward division of labour (Jensen & Meckling, 1976), is discussed in the risk-

sharing literature. In order to establish how individual goals inside an institution could be coordinated and employed to further organizational goals, agency theory was expanded to management-related fields (Eisenhardt, 2020). Therefore, the relationship or connection between the principal and the agent is at the center of agency theory. It is based on the supposition that the principal and agent are driven solely by self-interest.

According to Oluyinka et al. (2021), agency theory presupposes that if both the principal and the agents are primarily interested in maximizing their wealth, there is a strong probability that the agents will act in their own interests rather than the principal's interests. This study argues that rather than the shareholders acting as the principal, management, acting as the agent, will likely build internal controls to fulfill its demands. As a result, it is believed that the agency theory can be used to explain why management is inclined to use management accounting procedures when making choices.

2.2.2 Stakeholder Theory

According to this notion, the interests of the various stakeholders in an organization must be balanced. The stakeholder theory is an extension of the agency theory since it considers interest groups other than the owners, including competitors, suppliers, customers, employees, the government, and the host community. In the context of this study, it is reasonable to anticipate that stakeholders will influence the adoption of management accounting techniques for decision-making. Because investment decisions are an essential part of modern management accounting processes, external stakeholders will have an impact on the creation and implementation of strategic management accounting procedures. Stakeholder organizations will, in short, have

some influence over how management accounting practices are applied by businesses. The stakeholder theory sheds light on how outside parties affect strategic management accounting procedures. According to Abdel-Kader and Luther (2020), the adoption of management accounting is significantly influenced by the power of the client. According to Cuganesan et al. (2019)'s analysis of an Australian public-sector organization, the organization deals with a variety of stakeholder interests that directly affect its planning through institutional arrangements. According to Kim et al. (2020), an organization's management accounting function affects both internal and external parties.

2.2.3 Contingency Theory

Throughout the history of management accounting study, scholars have employed a range of theories and paradigms as a foundation for generalization (Ajibolade, Arowomole, & Ojikutu, 2010; Al-Htaybat & Alberti-Alhtaybat, 2013; Scapens & Bromwich, 2001; Scapens & Bromwich, 2010). Paradigms are groups of conjectures, beliefs, values, and actions that build up viewpoints on the world, according to Malmi (2010) and Lukka (2010). They give work focus and direction and aid the research community in accumulating more knowledge about the desired subjects. As a result, both the theory of contingency and the theory of change valence lend support to this study. The two most significant studies that improved the application of eventuality theory in management accounting research, according to Haldmaand Laats (2002) and Ajibolade (2013), were Khandwalla's study from 1972 and Hofstede's well-known fieldwork from 1967. Organizational study produced the premise. It is predicated on the idea that different organizations can benefit from different organizational structures. The key to organizational effectiveness, according to Ajibolade (2013), Al-Htaybat and

Alberti-Alhtaybat (2013), Drury (2002), Haldma and Laats (2002), Islam and Hu (2012), and Otley (1980), is a fit between the type of technology, the environment's volatility, the size and features of the organizational structure, and its information system. The environment, technology, size, structure, competitive strategy, strategic mission, and national culture of an organization are just a few of the variables that affect how well management accounting systems work (Ajibolade, 2013; Drury, 2002; Islam & Hu, 2012). The contingency theory supports this. Al-Htaybat and Alberti-Alhtaybat (2013) state that this theory is frequently applied in positivistic studies where predetermined assumptions are first clarified and then put to the test. Ajibolade et al. (2010), Chenhall (2003), Martin, Hiebl, Duller, Feldbauer-Durstmüller and Ulrich (2015), as well as other academics, have all endorsed the management accounting study.

On the other hand, the concept of change valence suggests that the degree of commitment to a change is primarily determined by that valence (Weiner, 2009). This is the significance that members of the organization place on a particular, upcoming organizational change. Does the organization's membership value the particular change that will happen soon? Do they think it's significant, advantageous, necessary, or worthwhile? According to this hypothesis, organizational members will feel more inspired or determined to take the essential steps for the change implementation the more they value the change. According to Shea, Jacobs, Esserman, Bruce, and Weiner (2014), the company's expected benefit is one factor in change valence. According to Weiner's (2009) research, organizational members may value a planned organizational change in this scenario if they feel that an organizational change of some kind is urgently needed, effective, and will help solve a significant organizational problem.

Thus, the anticipated benefits are what motivate the desire for the change. Numerous contingent factors, which may be inherent to Nigerian banks, are hypothesized to have an influence on the adoption and application of the SMA technique in this study. These factors include the banks' need for innovation to gain a competitive edge over rivals, their desire to increase their market share, and their need to expand their customer base. Using contingency theory, Drury (2002) made the observation that a company might acquire a competitive and strategic edge in its industry and compared to its rivals. This is an important addition to Simmonds' (1981) external orientation of SMA. Therefore, it is suggested by this study that the ease of access to data on clients, rivals, and the market will aid in the facilitation of strategic decision-making in Nigerian banks. The premise of this argument is that the advantages management accountants aspire to achieve would lead them to abandon current management accounting methods in favor of fresh ones.

2.3 Empirical Review

2.3.1 Effect of Balanced Scorecard on Decision Making

In order for oil and gas enterprises to survive in global markets, Abu Zaid (2021) undertook a study with the goal of evaluating traditional costing systems and the processes used to design them as well as researching the function of target costing systems. According to Jawad and Al-Rifa'i's study (2020), the sample company should not follow scientific procedures when making decisions involving accepting special orders or performing deferential cost analyses, despite the importance of these processes in assisting managers to take decisions. The findings of Kee (2019) demonstrated that the conventional target costing model can result in products with a negative present net value while rejecting those with a positive present net value.

Furthermore, it is a characteristic of the model, according to the mathematical analysis of the conventional target costing model.

Joudeh et al, (2021) indicate that most companies have a clear concept of management accounting and that most of these companies have separate departments or employees who are responsible for implementing the management accounting practices. The application of management accounting practices in businesses, especially contemporary techniques, is, nevertheless, frequently lacking. According to Adler et al.'s 2019 survey, the majority of companies combine traditional management accounting methods with a range of modern approaches. The research also showed that the companies' limited human resources are to blame for the difficulties in implementing current technologies. According to Wegman (2019), the Activity Based Costing logic is still the greatest way to enhance management accounting systems and guide strategic decisions.

2.3.2 Effect of Just-In-Time System on Decision Making

According to Jaradat and Al-Shebli's (2018) study, management accounting information plays a role in commercial banks merging at every step. The research by Ghneimi (2018) demonstrated that implementing the target costing technique aids in enhancing the achievement of the bank's strategic goals, which include survival, expansion, and continuity in the current highly competitive market.

The study by Al-Tarawneh (2016) demonstrated that the cost causes in the costing system yield more accurate findings than the conventional foundations, and that the activity-based costing approach strongly stresses activities as the cost's primary purpose. According to Al-Nsour's (2016) study, industrial organizations use old

management accounting processes more frequently than new ones, which shows that there is still a knowledge gap about these methods. The abbreviation SMA has a longer history than the concept, which was first used in management accounting by Simmonds in 1981 (Hart, 2003). Simmonds developed an externally focused approach using SMA, which included data collection and analysis on costs, market shares, and resource consumption for both a firm and its rivals. Similar to how Bromwich (1990) defined SMA, which he defined as the delivery and analysis of financial data on the firm's product markets and competitors' costs, cost structures, and continual observation of the company's and its rivals' activities in these markets. Scholars continue to maintain that SMA is a theoretical concept with no practical applicability, despite this renewed interest (Alnawaiseh, 2013; Juras, 2014).

Cinquini and Tenucci (2007) state that the need for outside data to lower environmental uncertainty and support strategic choices is what motivates the creation and use of SMA. The basic understanding of the growing importance of information beyond the firm's boundaries is what propels the development of research in SMA (Bromwich, 1990; Cinquini & Tenucci, 2007; Simmonds, 1981). Two economic theories were examined and applied in Bromwich (1990) to offer a theoretical foundation for the potential increase in accountant participation in what is known as strategic management accounting (SMA). One of these theories talks about the fundamental qualities of items sold commercially. In this instance, he said that accountants should take into account not only the cost structures of their own business but also those of all other businesses operating in the relevant market and any prospective competitors, as costs cannot be evaluated in a vacuum from issues pertaining to demand. His second study examined whether a company's cost structure enables it to stick to its market strategy in the face of possible competitors.

According to Lachmann, Knauer, and Trapp's (2013) study on SMA adoption in hospitals, the procedure is not widely used in hospitals and instead differs amongst institutions depending on their structural features. According to the research by Cadez and Guilding (2008), the success of the SMA technique's implementation in Slovenian businesses in accordance with the contingency theory is significantly influenced by aspects like firm size and strategy. According to Tillmann and Goddard (2008), the primary finding of SMA has to do with the basic phenomenon of sensory generation. They investigated the ramifications of management accounting as well as the consequences of sense-making strategies in their study. Roslender and Hart (2003) claim that the SMA approach's implementation has little impact on UK enterprises. This could be the case since, even after SMA was first discussed in the literature over 20 years ago (Drury, 2002; Juras, 2014), there is still little to no consensus on its precise definition. Even though it seeks to integrate ideas from management accounting and marketing management into a framework for strategic management, it is better understood as a general approach to accounting for strategic positioning (Roslender & Hart, 2003).

Dixon (1998), on the other hand, used case study data to research the practical use of SMA within a changing business setting. According to his results, the idea behind SMA is sound, but it has some practical drawbacks. Furthermore, he argued that the information demands placed on a business by strategic management accounting outweigh the benefits it provides in preserving a competitive advantage, notwithstanding the foundation of SMA, which maintains that an organization should strive to accumulate a stockpile of strategic information weapons. In order to determine the accounting methods that would be covered by SMA, Guilding, Cravens, and Tayles

conducted a survey of large corporations in New Zealand, the UK, and the US in 2000. They found that a scale of 12 SMA practices had a wide range of application rates, the most prevalent of which were competitor accounting and strategic pricing. Based on the perceived benefits that adopting such methods is thought to give, they assert that there is potential for broader adoption of the SMA technique in each of the countries examined. Similar levels of SMA usage across nations are noted, but after taking organization size into consideration, it was discovered that some strategies are used more frequently in New Zealand and less frequently in the UK and the US. Additionally, their research shows that professional accountants have a limited understanding of "strategic management accounting" and that the word is rarely utilized in firms.

Based on a study of 20 persons from four distinct Romanian firms in Bucharest, AlMaryani and Sadik (2012) presented three key conclusions on the implementation and utilization of SMA approach in Romanian enterprises. First, they discovered that SMA was crucial to attaining the strategic aims and aims of modern management. Second, they pointed out that the use and use of the SMA technique could lead to a variety of advantages. They concluded by noting the numerous limitations and challenges faced by Romanian businesses while applying and utilizing the SMA technique. According to Nixon and Burns (2012), the relatively brief life cycles of the majority of strategic management (SM) tools and many concepts may be consistent with the fact that the SMA technique has not been extensively adopted and that progress in the SMA literature appears to have come to a standstill. They found a fundamental discrepancy between the SMA's apparent decline and the steadily increasing number of theories, concepts, models, tools, disciplines, academic and professional journals, and

consultancy practices that comprise the SM domain. But they came to the conclusion that organizational and strategy formulation processes were driving the evolution of SMA practices.

2.3.3 Effect of Target Costing on Decision Making

According to Cuganesan, Dunford, and Palmer (2012), the practices used in empirical SMA research have received little attention. They also pointed out that the significance of strategy in the public sector had been disregarded by SMA research. These they looked at offered distinct ways that management accounting contributes to strategy by way of certain organizational practices. They added that specific management accounting methods applied to strategic planning by public sector organizations offer a helpful contrast to the private sector focus that has dominated SMA research up to this point. Additionally, their analysis makes recommendations for future balanced SMA research agendas to other academics.

Rickwood et al. (1990) investigated how the management accounting function of an organization responds to a threat to its market position posed by a competitor's behavior. They emphasized that a firm's management accounting strategy, which adopts a strategic perspective and recognizes the significance of the external environment and how the competition may be expected to react to company market action, includes using market intelligence as one of its characteristics. They said that in addition to the regular presentation of accounting information, the management accountant's role should be understood to encompass the preparation of special reports that advance him to the position of authority on the decision-making team. This effectively captures Simmonds' original perspective on SMA.

Collier and Gregory's (1995) examined the application of SMA technique in the hotel sector. They found that accounting departments inside hotel chains are becoming more and more involved in strategic management accounting, both in terms of planning and ad hoc exercises on the study of the market and competition. They made the point that the industry's open and uniform structure and the fierce competition that exists among hotel companies in the market are both consistent with the widespread usage of strategic management accounting. Dixon and Smith (1993) created a novel method of presenting information that is strategically significant within the framework of SMA for the formulation and implementation of corporate strategies in a setting that is getting more and more dynamic. By analyzing the major SMA process principles, they also identified a path forward for practitioners and academics to take advantage of SMA abilities to enhance data flows into the strategy review process.

According to Shaqqour (2020), in order to ensure that relevant and appropriate information is provided in order to accomplish the organization's goals, SMA entails the creation and use of a wide range of procedures, techniques, and instruments at all organizational levels that are in line with the company's internal and external strategic direction. Duci (2021) views SMA as a subset of management accounting, and it still serves the function of giving decision-makers information. SMA refers to a prospective vision as opposed to management accounting's historical perspective. SMA has a competitive perspective and focuses on multiple time periods. SAM makes use of economic concepts and theories to influence decision-making. SMA's connections to accounting, marketing, IT, and strategic management make it a multidisciplinary field.

Despite the fact that some features of SMA have influenced how businesspeople think and speak, the study's evaluation of earlier empirical publications on the topic revealed no persuasive evidence that SMA approaches have been widely used. Although some contend that this is because managers don't often grasp what SMA comprises, other studies on SMA practices show that competitor accounting and strategic pricing are the most widely used strategies (Cravens & Gilding, 2001; Guilding et al., 2000; Tomkins & Carr, 1996). Research confirms the claim made by Lord (1996) that many businesses use SMA's techniques and features. Due to its numerous shortcomings and the widespread doubt around SMA, the inquiry led to the conclusion that it is a "figment of academic imagination". SMA strategies have been adopted by numerous businesses over time, according to research and other statistics. This illustrates how widely businesses have used the techniques.

The use of SMA methods across developed and emerging nations as well as different industries including manufacturing and services has thus been covered in this subsection. Some studies on SMA practices indicate that the most commonly utilized tactics are competitor accounting and strategic pricing, although some arguing that this is because managers don't always understand what SMA entails (Cravens & Gilding, 2001; Guilding et al., 2000; Tomkins & Carr, 1996). Studies support Lord's (1996) assertion that a large number of enterprises utilize the features and procedures of SMA. The investigation came to the conclusion that SMA is a figment of academic imagination due to its various flaws and the general lack of confidence in it. Research and other data indicate that many firms have implemented SMA techniques over time. This demonstrates the extent to which businesses have applied the strategies.

Any organization's decision-making procedures can be divided into three categories: operative, strategic, and tactical. Only tactical decision-making has an external and future direction among these three levels. Simmonds (1982) thought that SMA operates independently as a distinct and comprehensive technique that management accountants have to use. It acts as a foundation for making business decisions that would improve or favourably affect how well companies function by giving them an edge over competitors. Strategic management accountants can now participate as crucial members of the strategic decision-making team rather than simply serving as information providers.

According to Guilding et al. (2000)'s study on the use of SMA approaches in the USA, UK, and New Zealand, these nations use SMA strategies for decision-making at a high rate. An empirical study by Cadez and Guilding (2007) examined the application of SMA techniques for strategic decision making, strategic pricing, strategic costing, and brand valuation in a sample of Australian and Slovenian companies. The findings showed that for Slovenian enterprises, two strategies strategic pricing and strategic costing performed better than average. The single strategic pricing method used by the Australian businesses outperformed the median. However, the relative rankings of the three strategies are the same when looking at them from a cross-country viewpoint. This demonstrates the widespread usage of SMA methodologies for strategic decision-making by big businesses in Slovenia and Australia. According to Cadez and Guilding (2008) research, applying SMA is positively correlated with a suggested strategy, purposeful development of strategy, company size, and the accountant's engagement in strategic decision-making activities.

In Nigerian banks, a developing nation, a review of the value of SMA usage reveals that SMA considerably affects strategic decision-making in terms of acquiring a competitive edge and boosting market share. Since the study validates the notion that SMA could enhance banking strategy, banks in other developing countries should take note of it (Oboh & Ajibolade, 2017). In a different study, Guilding et al. (2000) discovered that the two SMA strategies that were used the most frequently were competitor accounting and strategic pricing (sometimes referred to as strategic decision making). We asked questions of large corporations in the US, UK, and NZ to find out which accounting practices would be classified as SMA.

A Jordanian study (Shaqqour, 2020) found that there is a positive correlation between the financial failures of industrial companies listed on the Amman Stock Exchange (ASE) and the vertical and horizontal integration between SMA and operational and strategic decision-making. The report suggests that Jordanian businesses use sophisticated accounting techniques and instruments (SMA procedures), since they will lower the number of financial setbacks and raise performance levels by improving tactical and strategic decision-making. In their study on the use of SMA in the consumer products industry in Vietnam, Nguyen and Nguyen (2021) opine that the use of SAM techniques can facilitate strategic decision-making by augmenting the competitiveness and performance of the aforementioned enterprises. According to the findings of the study by Vu et al. (2022), the application of SMA methodologies to Vietnam's logistics firms has led to three important discoveries that could improve strategic decision-making. Les gets a useful tool from SMA to gather information for them to use when making strategic judgments. Second, the governance features of SMA might have a big influence on managers and accountants. The size and organizational structure, technical

development, SMA implementation costs, and strategy all favorably affect the financial and non-financial components of the SMA application. The significance of SMA is now better understood by administrators as a result of this finding. Consequently, the SMA will be implemented in a contemporary, competitive setting in conjunction with relevant sustainable development programs.

2.4 Conceptual Framework

The relationships between the variables under examination are represented diagrammatically in this chapter's part. The arrows indicate the relationship's direction, while the concepts in the rectangle are the variables. The independent variables are those that are fastened to the arrow's nock. The dependent variables, on the other hand, are those that are connected to the arrow's bullet point. The just-in-time system, target costing, and balanced scorecard are the independent factors, according to Figure 2.1. Making decisions is also a dependent variable. As a result, the decision-making process for the just-in-time system, target costing, and balanced scorecard all regresses. Because it looks at a company's performance from four different angles rather than simply the financial one, which is insufficient to give a whole view of the firm, the balanced scorecard serves as both an assessment and a strategic tool (Horngren, 2021).

These four axes are the customer, internal operations, financial, and innovation and learning axes. The process of regulating and determining the expenses of the proposed product as well as the volume of production that yields the required profit at its anticipated selling price in the future is known as target costing. It is one of the cost-management techniques that reduces overall production costs over the length of the product's life cycle with the assistance of the manufacturing and engineering design

departments (Sakurai, 2021). The target costing system is one of the tactical instruments that reduces a product's production costs over the course of its life cycle, claims Kato (2020). It denotes a series of actions taken during the planning and development stages with the goal of reducing the life-cycle costs of high-quality products while also meeting consumer needs. The just-in-time production system, according to Al-Bishtawi and Al-Matarneh (2019), is a method that depends on technology to cut waste during the purchase and production processes and get rid of all types of stock while also meeting customer demands promptly and in the required quantities.

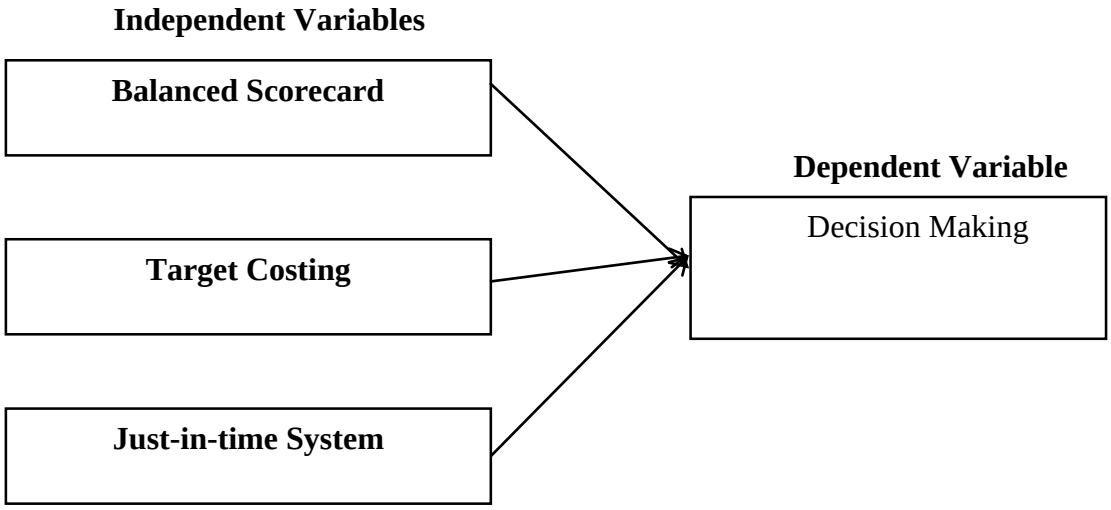

Figure 2.1 Conceptual Framework

Source: Researcher's Construct (2023) as adapted from past studies

2.5 Chapter Summary

The chapter reviewed related and relevant past studies. It reviewed literature on the four main concepts of the study including Balanced Scorecard, Just-In-Time System, Target Costing, and Decision Making. Additionally, the theories underpinning the study were the Agency theory, Stakeholder theory and Contingency theory. Moreover, findings from related past studies (empirical review) were presented. Finally, the diagrammatical representation of the relationships studied was presented.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The study's goal is to investigate how Ghanaian manufacturing companies use accounting, strategic management, and decision-making processes. The investigation techniques used are described in this chapter. This section contains information about the study's demographics, sample size and methodology, data source, data collection tools, data validity and reliability, and data analysis. Additionally, discussed are the design and research approaches.

3.1 Research Approach

The fundamental inductive or deductive attitude of the researcher is referred to as the research technique. According to Bryman and Bell (2009), the positivist paradigm, that allows the formation of hypotheses and the analytical testing at a reasonable probability level of expected results, is best suited for the deductive technique. Before moving on to particular empirical data while utilizing a deductive technique, the researcher first establishes an abstract, logical relationship between concepts (Saunders et al., 2019). Therefore, the position of current theory is well supported in deductive study since it guides the formulation of hypotheses, the choice of variables, and the ensuing measurements that researchers intend to utilize. The inductive approach is a technique for developing a hypothesis that starts with case data and makes an effort to generalize the phenomenon being studied (Hyde, 2000). The inductive method makes use of obtained facts to generate hypotheses based on data analysis. Inductive methodology involves data collection and theory development through data analysis. The inductive technique, according to Saunders et al. (2009), moves from specific observations to

larger generalizations and hypotheses. It's sometimes referred to as a "bottom-up" approach. Research using the inductive method begins with particular observations and behavior that help to spot patterns and trends, create some working hypotheses that can be tested, and ultimately arrive at some broad generalizations or theories.

Research methodologies include both qualitative and quantitative approaches (Adams et al., 2007). Kothari (2004) defined a qualitative phenomenon as one that involves, has to do with, or is related to quality or kind. In contrast, the foundation of quantitative research is the quantification of quantity or amount (Kothari, 2004). It is applied to phenomena that acquire a numerical form. The study is quantitative in nature since it measures behavior and sample characteristics and investigates generalizations about the population at large (Hyde, 2000). Additionally, a sizable and representative sample of the target demographic is used.

3.2 Research Design

This study adopted both the survey and cross-sectional research designs. Survey research design refers to a particular type of research design where the primary method of data collection is by survey. In this study design, surveys are used as a tool by researchers to gain a greater understanding about individual or group perspectives relative to a particular concept or topic of interest (Saunders et al., 2009). Surveys are an excellent way to gather lots of information from many respondents. Moreover, surveys are relatively cost-effective (Saunders et al., 2012). Survey research also tends to be a *reliable* method of inquiry. This is because surveys are standardized in that the same questions, phrased in exactly the same way, are posed to participants (Robson, 2002). Despite the advantages of survey research design, survey researchers are

generally confined to a single instrument for collecting data, the questionnaire. Surveys are in many ways rather inflexible (Saunders et al., 2012).

On the other hand, cross-sectional design entails collecting data at a particular point in time (Saunders et al., 2009). The main strength of cross-sectional study is that it is relatively quick and inexpensive to conduct. However, it cannot be used to analyze behaviour over a period to time (Saunders et al., 2012).

3.3 Population of the Study

Ghanaian manufacturing companies constituted the study's population. Manufacturing companies which have operated for not less than 5 years were involved in the study. The justification for considering the minimum year to be 5 is that firms that had operated for relatively longer period of time might have the required systems in place to adopt the contemporary management accounting techniques for decision making. According to the National Board for Small Scale Business, over a dozen firms in Ghana are involved in manufacturing or production (Frempong & Adu-Yeboah, 2021).

3.4 Sample Size and Sample Technique

A sample is a portion of the population that has been chosen at random or in another way to adequately represent the population (Punch, 2020). Probability and non-probability sampling strategies were extensively categorized by Saunders et al. (2012). When using probability sampling procedures, it is known and typically equal for all cases how likely each case is to be chosen from the population. On the other hand, when utilizing non-probability sampling techniques, it is uncertain how likely it is that each example will be selected from the total population. When the population is vast, it is

frequently impractical to include every participant in a study. As a result, a sample must be chosen to accurately reflect the population. The basic random sample strategy was used in this study to recruit participants. The use of this sampling strategy is justified by the fact that, in addition to being scientific and preventing research bias, it also gives respondents equitable access to the opportunity to contribute to the achievement of the study's goals. The sample size of the study was 250 people.

3.5 Source of Data

Data is the general term for all information obtained for a study or research effort. It is feasible to use both primary and secondary data. "Primary data" is defined by Jankuwics (2020) as information that may be obtained from sources like attentive observation, information from archives, answers to questions during questionnaires and interviews, and case studies that have been put together. First-hand accounts and unadulterated data are available from primary sources. Numerical data, creative works, and interview transcripts are a few examples. Primary data are the original findings of a study. There are situations where gathering and analyzing primary data requires more time and effort than secondary data. Primary data are first-hand accounts that the research team provides to support the achievement of the study's goals. Secondary data information, or a collection of both published and unpublished papers pertaining to the topic, contains the research's logical framework (Merriam, 2009). Secondary sources provide data and analysis that has already been used by other researchers. Journal articles, book reviews, and scholarly essays are a few examples. Primary sources are those that have already been published in secondary sources, which include books, newspapers, magazines, journals, web portals, etc. Techniques for obtaining secondary data offer several benefits, such as reduced costs, time, and effort. The data for this study was

collected via primary data sources in order to obtain appropriate and adequate information. The questionnaires include a variety of questions designed to help the study reach its goals.

3.6 Data Collection Instruments

Information gathering from your target respondents is referred to as data collection (Saunders et al., 2012). The data for this research was collected with the help of a structured questionnaires, and Saunders et al. (2012) reported that questionnaires have traditionally been the primary data collection method in business and management research. Using same questions in a planned order, each participant is asked to complete a questionnaire as a way of collecting information. A questionnaire is a method of gathering data in which each subject is required to answer the same set of inquiries in a specific order. Self-administered questionnaires (filled out by the respondents) and interviewer-administered questionnaires (filled out by the interviewer) were the categories used by Saunders et al. (2009) to categorize questionnaires. Three components made up the questionnaire. The demographic information for the respondents was supplied in Section A; the measurement items for the independent variables, such as the balanced scorecard, target costing, just-in-time production system, value chain analysis, and benchmarking, were presented in Section B. These evaluation criteria were taken from Jbarah (2018). On a Likert scale of 1-Strongly disagree to 5-Strongly agree, each of these criteria was evaluated. The decision-making variables that were noticed were provided in Section C. These evaluation criteria were taken from Jbarah (2018). On a Likert scale of 1-Strongly disagree to 5-Strongly agree, the measurement items under this section were answered.

3.7 Data Collection Procedure

The researcher got in touched with the respondents via electronic questionnaire developed using Google form. The reason for the choice of this medium is the long distances among the regions. This enabled the author to include the required number of manufacturing companies in Ghana. With regards to how the respondents got access to the electronic questionnaire, it was sent to the various social media platforms of the manufacturing companies such as WhatsApp. The author equally e-mailed the electronic questionnaire to respondents that have their e-mails on the websites. Phone calls were also placed to respondents that have only contact numbers without e-mails on their websites. Each manufacturing company was expected to respond to a questionnaire with any staff that has the needed knowledge about the firm, industry and the constructs to provided responses to the measurement items.

3.8 Data Validity and Reliability

3.8.1 Evaluation of common method bias

When using a questionnaire to gauge opinions, there is a chance that the results will vary depending on how the questionnaire was created. This is termed as Common Method Bias (hereafter, CMB). It therefore becomes necessary to test the presence of this bias by adopting systematic and statistical approaches (Podsakoff *et al*., 2012). Because of this, the author carried out a pilot test to get rid of any ambiguous claims and give the same interpretations to the things that were observed. Every point on the Likert scale also had a specific label, such as 1 for "strongly disagree," 2 for "disagree," 3 for "indifferent," 4 for "agree," and 5 for "strongly agree." Statistically, the popular Harman's one-factor test for determining the presence of CMB was adopted. This test suggests that there is the presence of CMB when a single factor accounts for 50% or

more variance among the measurement items. Harman's one-factor test was run in SPSS and the results revealed that the measurement items were devoid of CMB since the first factor was 42.432% which is less than 50%.

3.8.2 Exploratory Factor Analysis (EFA)

To find measurement items with weak factor loadings (less than 0.5) and factors loading on various constructs, EFA was done in SPSS. Measurement items loading on different or multiple constructs and having poor factor loadings (less than 0.5) were removed from the analysis during the exploratory factor analysis (Amoako et al., 2022). The Total Variance Extracted (TVE) from the values shown in Table 3.1 was 79.229%, above the minimum threshold of 50%. The current study achieved a Kaiser-Meyer-Olkin (KMO) score of 0.871, which indicates strong sample adequacy. The KMO score is a gauge of sampling adequacy and should be at least 0.6. Additionally, the results of the Bartlett's Test of Sphericity must be statistically significant in order to demonstrate the strength of the relationships between the variables and ensure EFA. The obtained results (X2 = 3279.307; Sig. 0.000) demonstrated that EFA was adequate because there was sufficient correlation between the variables. As a sign of positive definiteness in the data used for the estimation, the Determinant of Correlation should also not equal zero (zero). 1.365E-6, which is greater than zero (0), was the determined value for EFA.

Table 3.1: Exploratory Factor Analysis (EFA)

	Component			
Measurement Items	**1**	**2**	**3**	**4**
BSC1	.905			
BSC2	.916			
BSC3	.924			
BSC4	.920			
BSC5	.891			
TAC1				.870
TAC2				.885
TAC3				.852
JIT1		.715		
JIT2		.826		
JIT3		.848		
JIT4		.799		
DCM1			.738	
DCM2			.867	
DCM3			.809	
DCM4			.736	

Total Variance Extracted		*79.229%*
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*.871*
Bartlett's Test of Sphericity	*Approx. Chi-Square*	*3279.307*
	Df	*120*
	Sig.	*.000*
a. Determinant		1.365E-6

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 4 iterations.
Source: Field Work (2023)

3.8.3 Convergent Validity and Reliability

Cronbach's Alpha was calculated for each variable used in the study to ensure that they all complied with the validity and reliability requirements. The fact that all of the unobserved variables had Cronbach's Alpha values higher than the required minimum of 0.70 indicates that the measuring items had a high level of internal reliability (see Table 3.1). To assess the validity and reliability of the data, Composite Reliability (CR) and Average Variance Extracted (AVE) calculations were made. Fornell and Larcker

(1981) stipulated that the composite reliability (CR) must be at least 0.7 and the average variance extracted (AVE) must be at least 0.5, both of which were met for all the constructs. This indicates that convergent validity was achieved.

Table 3.2: Construct Validity and Reliability

Unobserved Variables	Items	Cronbach's Alpha	Composite reliability	Average variance Extracted
Balanced Scorecard	5	0.966	0.961	0.830
Target Costing	3	0.853	0.903	0.755
Just-In-Time System	4	0.876	0.875	0.638
Firm Performance	4	0.879	0.868	0.623

Source: SPSS Output

3.8.4 Discriminant Validity

The square root of the extracted raw average variance (AVE) and the related inter-correlation coefficients were compared to determine the discriminant validity, as indicated by Fornell and Larcker (1981). √AVE is shown in bold italics and underline, which were all larger than the respective correlation coefficients. The least √AVE was 0.789 and the highest correlation was 0.624 (between just-in-time system and decision making). Results as presented in Table 3.4 also suggest that the highest correlation score in the entire model was 0.624 (between just-in-time system and decision making), which was less than 0.7, and was concluded there was no multicollinearity in the dataset.

Table 3.3: Discriminant Validity

	FirmAge	FirmSize	Leverage	BSC	TAC	JIT	DCM
FirmAge	-						
FirmSize	.099	-					
Leverage	.206**	-.112	-				
BSC	.056	.018	.211**	***.911***			
TAC	.043	-.006	.050	.214**	***.869***		
JIT	.075	.011	.077	.358**	.188**	***.799***	
DCM	-.001	.043	.092	.405**	.224**	.624**	***.789***

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field Work (2023)

3.9 Confirmatory Factor Analysis

As shown in Table 3.4 and Figure 3.1, the data was further evaluated using Confirmatory Factor Analysis (CFA) after the EFA reached the appropriate criteria. The standardized factor loadings for each measurement variable are predicted to be at least 0.5, just like the EFA. All of the measurement items were successful in doing this, proving that the measurement items strongly defined the suggested latent variables. All of the standardized factor loadings were more than 0.5 as predicted by the CFA results. CMIN/DF should be less than 3, GFI should be at least 0.8, TLI and CFI should all be greater than 0.9, and RMSEA and RMR should likewise be less than 0.08 according to model fit indices (Hair et al., 2016). Since the results matched these criteria, it can be inferred from Table 3.4 that the data accurately fit the construct model.

Table 3.4: Confirmatory Factor Analysis (CFA)

Model Fitness: CMIN=186.103; DF=95; CMIN/DF=1.959;Std. Factor GFI=0.916; PClose=0.063; TLI=0.965; CFI=0.972; RMSEA=0.062;Loadings RMR=0.043	
Balanced Scorecard (BASC)	
BSC1	.904
BSC2	.944
BSC3	.940
BSC4	.926
BSC5	.894
Just-In-Time System (JUIN)	
JIT1	.789
JIT2	.864
JIT3	.837
JIT4	.675
Target Costing *(TARC)*	
TAC1	.814
TAC2	.886
TAC3	.744
Decision Making (DECM)	
DCM1	.764
DCM2	.781
DCM3	.897
DCM4	.792

Source: Fieldwork (2023).

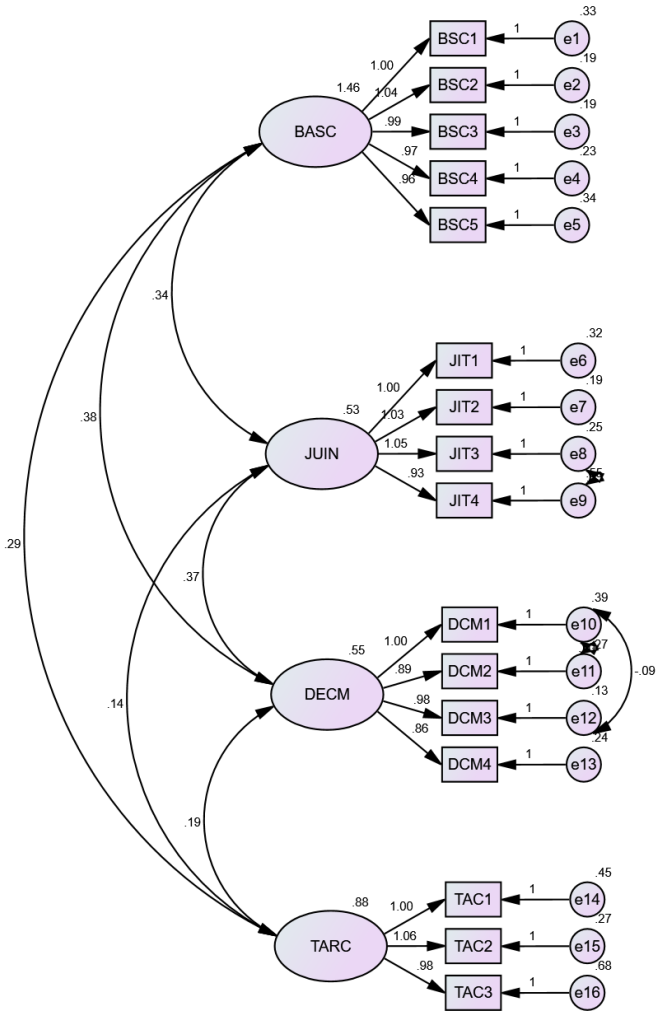

Figure 3.1 Diagrammatic Presentation of CFA

Source: Fieldwork (2023).

3.10 Data Analysis

The rigorous process of presenting the obtained data while keeping the study's objectives in mind is known as data analysis. The study employed Amos (v.23) and SPSS (v.25) for data analysis. In particular, structural equation modeling, or SEM, was employed to analyze the gathered data. First, frequency and percentage measures were used to represent the respondents' characteristics. Next, mean scores and standard deviation were used in a descriptive analysis. This was applied to every research aspect, including the just-in-time system, target costing, balanced scorecard, and decision making. Regression analysis using SEM was then carried out to ascertain the impact of the independent factors on the dependent variable.

3.11 Ethical Considerations

This study was based on facts, considered the world to be external and objective (Hürlimann, 2019) hence; the study set aside personal values. In conducting the study, the data was obtained from legal means, the data from all the manufacturing firms involved were merged and analysed aggregately instead of individually. Additionally, the data was not manipulated and forged and the names of the firms were not presented to enhance anonymity (Hürlimann, 2019).

3.12 Chapter Summary

This chapter explains the way in which the study was conducted, including the beliefs and principles behind it, the plan and method used, and the approach taken. Survey and cross-sectional research design were adopted. The study is quantitative in nature. Ghanaian manufacturing firms formed the population. Questionnaire was used as the data collection instrument. Validity and reliability tests were conducted.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF RESULTS

4.0 Introduction

The aim of the research was to investigate Ghanaian manufacturing enterprises' strategic management, accounting, and decision-making processes. The outcomes of the data analysis are presented in this part of the work. To interpret the numbers gathered, the chapter also explains the outcomes. The characteristics of the respondents are discussed, and descriptive analyses of the variables just-in-time system, target costing, balanced scorecard, and decision making are also provided. Techniques such as mean scores, frequencies, percentages, and structural equation models were employed in the data analysis and outcomes presentation.

4.1 Respondents Characteristics

According to Table 4.1, 17.2% of respondents had been in business for less than five years, 18.0% had been in business for five to ten years, 18.4% had been in business for eleven to fifteen years, 28.8% had been in business for sixteen to twenty years, and 17.6% had been in business for more than twenty years. The findings showed that, majority of respondents had been in business for 16 to 20 years. According to the distribution of respondents' leverage, low gearing represented 16.0% of respondents, moderate gearing 46.8% of respondents, and high gearing 37.2% of respondents. As a result, the majority of respondents were of a moderate gear. According to Table 4.1, 47.6% of respondents had fewer than 20 employees, 52.4% of respondents had between 20 and 40 employees, and none of the respondents had between 61 and 80, 81 to 100, or more than 100 employees. As a result, the majority of responses employed 20–40 people.

Table 4.1: Respondent's Demographics

Variable	Responses	Frequency (*N=250*)	Percentages (*%*)
Firm Age	Less than 5 years	43	17.2
	5-10 years	45	18.0
	11-15 years	46	18.4
	16-20 years	72	28.8
	Above 20 years	44	17.6
Leverage	Lowly Geared	40	16.0
	Moderately Geared	117	46.8
	Highly Geared	93	37.2
Firm Size	Below 20 employees	119	47.6
	20-40 employees	131	52.4

Source: Field Work (2023)

4.2 Descriptive Analysis

4.2.1 Balanced Scorecard

Table 4.2 provides the descriptive analysis for this idea. A Likert scale with 1 representing strongly disagreeing and 5 representing strongly agreeing was used to assess the measurement items. It was determined that a mean score of more than three indicated the "agree" range while a mean score of less than three indicated the "disagree" range. The respondents acknowledged that their firms utilize the balanced scorecard as a management accounting tool as the scorecard's overall mean score was 3.808 (above 3). The mean scores for each of the five distinct measuring items contained in this construct were also discovered to be higher than 3. Stated differently, the participants concurred that their organizations establish explicit strategic objectives and convey them to the investors, give consideration to performance indicators in order to fulfil their duties, synchronize individual and organizational performance, endeavour

to harmonize divisional and individual goals with the plan, foster administrative concord among employees, and cultivate organizational expertise to support them.

Table 4.2: Balanced Scorecard

Variables	Mean	Std. Deviation
cares for performance measurements to accomplish its works	3.840	1.329
synchronizes individual and organizational performance in an effort to align the objectives of each with the strategy of the division.	3.816	1.298
to improve employee administrative harmony and provide them with organizational knowledge to help them become more adept at what they do.	3.808	1.269
makes its approach known to the shareholders and clearly identifies its strategic objectives	3.780	1.340
synchronizes individual and organizational performance in an effort to align the objectives of each with the strategy of the division.	3.796	1.281
Total	***3.808***	***1.222***

Source: Field Work (2023)

4.2.2 Target Costing

Table 4.3 provided a descriptive study of this idea. On a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), respondents were asked to rate the measurement items. Mean scores above three were used to determine the "agree" range, whereas the "disagree" range was defined as mean values lower than 3. The respondents acknowledged that their companies use target costing as a management accounting approach, as evidenced by the total mean score for target costing being 3.711 (above 3). Furthermore, it was found that the mean scores of all 3 individual measurement items for this construct exceeded 3. This indicates that the respondents' companies agree to set aside a certain amount of money each year for R&D, that operation

engineering is planned to reduce costs and provide new models in the future, and that the production process is managed to keep product costs down.

Table 4.3: Target Costing

Variables	Mean	Std. Deviation
Our firm's……..		
operation engineering is planned to minimize expenses and generate novel models for the future	3.712	1.125
production process is overseen to minimize product costs.	3.712	1.241
allocates particular funds every year for the purpose of research and development	3.708	1.154
Total	***3.711***	***1.032***

Source: Field Work (2023)

4.2.3 Just-In-Time System

Table 4.4 presents the descriptive analysis for this concept. A Likert scale with 1 representing strongly disagreeing and 5 representing strongly agreeing was used to assess the measurement items. It was determined that a mean score of more than three indicated the "agree" range while a mean score of less than three indicated the "disagree" range. A total mean score of 4.213 (above 3) for the just-in-time system indicated that the respondents' firms adopt it as a current management accounting technique. Table 4.4 presents the descriptive analysis for this concept. A Likert scale with 1 representing strongly disagreeing and 5 representing strongly agreeing was used to assess the measurement items. The "agree" range was defined as having a mean score larger than 3, and the "disagree" range as having a mean score less than 3. Because the total mean score for the just-in-time system was 4.213 (above 3), it was decided that

the respondents' organizations employ it as a contemporary management accounting technique.

Table 4.4: Just-In-Time System

Variables	Mean	Std. Deviation
Our firm…….		
reduces the size of stock storage	4.276	.930
purchases raw materials and components as and when needed for production	4.272	.872
purchases stock with quantities appropriate to the size of production	4.196	.917
produces goods according to specific orders	4.108	1.006
Total	***4.213***	***.795***

Source: Field Work (2023)

4.2.4 Decision Making

Table 4.5 presents the descriptive analysis for this concept. A Likert scale with 1 representing strongly disagreeing and 5 representing strongly agreeing was used to assess the measurement items. The "agree" range was defined as having a mean score larger than 3, and the "disagree" range as having a mean score less than 3. With a decision-making average score of 4.254 (above 3), it was determined that respondents believed their companies made informed decisions. Furthermore, it was found that the mean scores for each of the four individual test items included in this construct were all higher than 3. This indicates that the respondents were in agreement that their companies make investment decisions that maximize benefits, decide whether to manufacture products internally or externally, decide on the quantity of units to produce and sell to break-even, and decide on special orders with knowledge.

Table 4.5: Decision Making

Variables	Mean	Std. Deviation
Our firm takes investment decisions that generate maximum benefits	4.264	.966
makes informed decisions on whether to make product in-house or outsource	4.244	.841
makes informed decisions on the number of units to produce and sell to break-even	4.240	.811
makes informed decisions on special order	4.268	.799
Total	***4.254***	***.734***

Source: Field Work (2023)

4.3 Path Analysis

Using the SEM approach in AMOS, the regression analysis was estimated. The analytical data are shown in Table 4.6 and Figure 4.1. Because of their possible influence on decision-making, the study took firm size, age, and leverage into account. Table 4.6 displays the study's findings, which indicate that the Unstandardized Beta Coefficients for firm size, leverage, and age are 0.040, 0.015, and -0.036, respectively. This implies that, for every percentage change in firm age, leverage, and firm size, there will be a corresponding percentage change in decision making by -0.036 (-3.6%), 0.015 (1.5%), and 0.040 (4.0%) respectively. The findings indicated that firm size and leverage had a positive but statistically negligible effect on decision making (p-value > 0.05), whereas firm age had a statistically insignificant negative effect (p-value > 0.05).

Table 4.6: Path Coefficients

Direct Paths	Unstandardized Estimate	Standard Error	Critical Ratio
Firm Size → DECM	.040	.074	.542
Leverage → DECM	.015	.053	.288
Firm Age → DECM	-.036	.027	-1.321
BASC → DECM	.126	.032	3.909**
JUIN → DECM	.600	.074	8.150**
TARC → DECM	.091	.043	2.130*

*Significant at 5%; **Significant at 1%; BASC: Balanced Scorecard; TARC: Target Costing; JUIN: Just-In-Time System; DECM: Decision Making

Source: Fieldwork (2023).

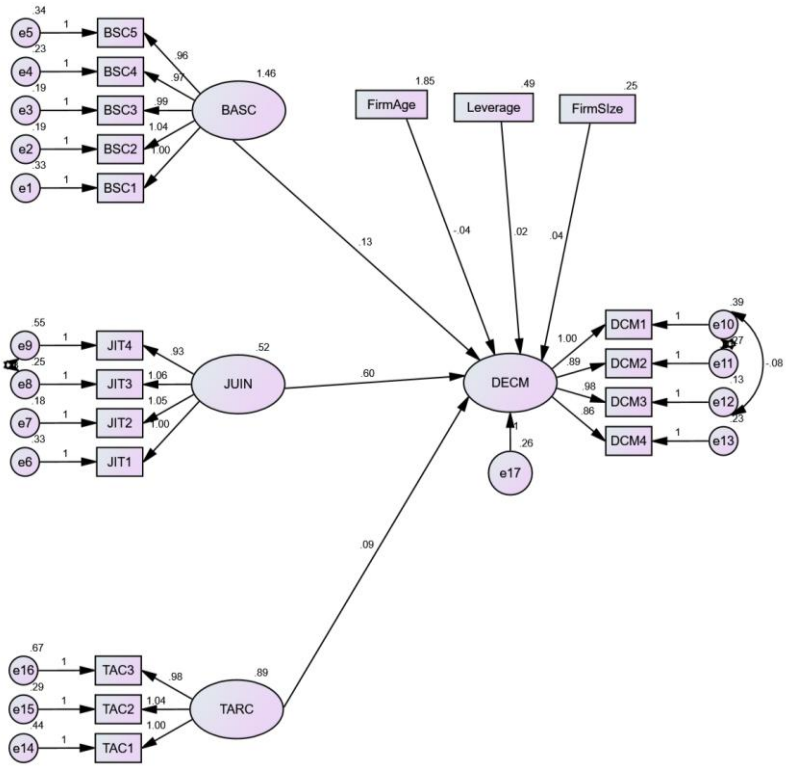

Figure 4.1: Path Diagram

Source: Fieldwork (2023).

4.3.1 Effect of Balanced Scorecard on Decision Making

The balanced scorecard was found to have a positive and statistically significant impact on decision-making for the hypothesized paths (β =0.126; p 0.01). It was revealed that an increase in balanced scorecard will result 12.6% increase in decision-making.

4.3.2 Effect of Target Costing on Decision Making

The effect of target costing on decision making was also seen to be positive and statistically significant ($\beta = 0.091; p < 0.01$). This indicates that a percentage increase in target costing will cause decision making to increase by 9.1%, and vice versa.

4.3.3 Effect of Just-In-Time System on Decision Making

The effect of just-in-time system on decision making was seen to be positive and statistically significant ($\beta = 0.600; p < 0.01$). This indicates that a percentage increase in just-in-time system will cause decision making to increase by 60.0%, and vice versa.

4.4 Discussion of Findings

4.4.1 Effect of Balanced Scorecard on Decision Making

The study found the effect of balanced scorecard on decision making to be significant positive. This is due to the fact that companies that employ balanced scorecards as a modern management accounting tool to assess performance typically disclose the company's non-financial as well as financial performance, which affects the decision-making process. The study's empirical results were consistent with those of Jbarah (2018), who discovered a substantial favourable impact of balanced scorecards on investment decisions made by Jordanian industrial businesses. Moreover, the study's finding is also in agreement with Humphreys et al. (2016) which found balanced

scorecard to be an important determinant in effective decision making. Additionally, the finding of the study was in tandem with Jassem et al. (2018) which revealed that balanced scorecard supports strategic decision making.

4.4.2 Effect of Target Costing on Decision Making

It was revealed that, target costing has significant positive effect on decision making. This is because firms that use target costing as a contemporary management accounting technique to allocate resources tend to reduce costs, thereby influencing their decision making. Empirically, the finding of this study was in tandem with according to Jbarah (2018) who found that target costing has a considerable favorable impact on investment decisions in Jordanian industrial enterprises. Moreover, the finding of this study was in tandem with Lee et al. (2002) which found target costing to influence decision making. Additionally, the study's finding was in agreement with Imeokparia and Adebisi. (2014) which found the nexus between target costing and decision making as evidenced by firm performance to be significant positive. Also, the finding of this study was in agreement with Hamid and Mansour (2016) which revealed that the significance of target costing in influencing corporate decision and performance. Again, the study's finding was in harmony with Kee (2019) which found target costing to be sufficient in improving decision making.

4.4.3 Effect of Just-In-Time System on Decision Making

The effect of Just-In-Time System and decision making was revealed to be both positive and significant. This is because firms that use just-in-time system as a contemporary management accounting practice to purchase raw materials or produce finished goods tend to reduce storage and other costs, thereby influencing their decision making. Empirically, the finding of this study was in tandem with Jbarah (2018) which found

the effect of just-in-time system on investment decisions in Jordanian industrial companies to be significant positive. Additionally, the finding of this study was in harmony with Adem (2022) which found Just-In-Time System to significantly influence decision making. Moreover, the study's finding is in agreement with Masudinm and Kamara (2018) which revealed that decision making of firms is affected by Just-In-Time System, a modern management accounting technique.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This research intends to investigate Ghanaian manufacturing organizations' strategic management accounting practices and decision-making processes. It is crucial to summarize the main findings of the study, which include the influence of the balanced scorecard, target costing, and just-in-time system on decision making, after reviewing the pertinent literature, using the necessary methodology, and analyzing the data. Additionally, this chapter offers ideas for enhancing the decision-making of the chosen manufacturing organizations and delivers conclusions based on the findings.

5.1 Summary of Findings

The study evaluated Ghanaian manufacturing organizations' strategic management accounting practices and decision-making processes. The study uses survey and cross-sectional research design and is quantitative and non-experimental. The population of Ghana was created by manufacturing firms. The data collection tool was a structured questionnaire. 250 respondents were chosen using a straightforward random selection procedure. The analysis method was structural equation modeling. Objective 1 examined how the balanced scorecard affected the decision-making of industrial companies. Additionally, objective 2 assessed how target costing affects the decision making of manufacturing companies. Lastly, objective 3 evaluated how just-in-time systems affects decision making. Agency, Stakeholder, and Contingency theories underpinned the theoretical basis of the study. Survey and cross-sectional research design were adopted by the study. 250 manufacturing firms in Ghana formed the sample

size. It was revealed that balanced scorecard has positive and significant effect on decision making. Moreover, the effect of Just-In-Time System on decision making was found to be significant positive. Finally, target costing was revealed to affect decision making positively and significantly.

5.2 Conclusion

The study concluded that balanced scorecard as a contemporary management accounting technique influenced decision making among Ghanaian manufacturing enterprises. This means that manufacturing firms that practice balanced scorecard tend to improve decision making. Moreover, Just-In-Time System was revealed to affect decision making positively and significantly. This means that manufacturing firms that practice Just-In-Time tend to improve decision making. Finally, target costing was found to positively and significantly influence decision making. This means that manufacturing firms that practice target costing tend to improve decision making.

5.3 Recommendations

Objective 1: It is recommended that management of firms should adopt balanced scorecard in making decisions. Decision making is crucial to organisational success. The ability for a firm to progress is dependent on its ability to take good decisions. Firms take decisions that will have both short-term and long-term impacts on the organisation. Therefore, the kind of impact, whether positive or negative, depends on how the decision was undertaken.

Objective 2: Management is expected to utilize Just-In-Time System in decision making. A reliable management accounting system is required in order for management to make informed decisions. Therefore, it is advised that management of businesses use

modern management accounting methodologies while making decisions. In order to support decision-making, management must establish management accounting operations with skilled and experienced management accountants.

Objective 3: Firms are encouraged to adopt target costing in decision making. Given this, management should implement a sufficient management accounting system to enable the effective and efficient performance of management accounting tasks. In order to maintain their professional competence and due care, management accountants should participate in CPD programs offered by organizations like the Chartered Institute of Management Accountants and the Institute of Chartered Accountants.

5.4 Suggestion for Future Research

The study was confined to manufacturing firms in Ghana. Future studies are encouraged in different sectors and/or countries to increase generalization. Additionally, this study adopted structured questionnaire. Future studies may consider adding interview to encourage respondents to express themselves. This study collected data at a point in time. Future studies may undertake longitudinal studies to assess how modern management accounting practices affect decision making over time. This may generate interesting results on the nexus amidst contemporary management accounting practices and decision making. Finally, this study considered three contemporary management accounting practices including Balanced Scorecard, Just-In-Time System, and Target Costing. Future studies are encouraged to include other modern management accounting practices such as benchmarking, business process re-engineering, continuous improvement, and value chain analysis.

REFERENCES

Abdel-Kader, M., & R. Luther. (2020). "IFAC's Conception of the Evolution of Management Accounting." Advances in Management Accounting 15: 229–247.

Abdullah, N. H. N., Said, J., Rahman, I. K. A., & Tuan Mat, T. Z. (2020). Strategic management accounting practice as a mediating role between strategy formation capability and value creation.

Abu Khashabah, A. A. (2019). Concepts and Characteristics of Investment Decisions and the Effecting Factors in It, and the Different Configurations for It, Publications of Al-Sharq Academy of Applied Sciences, Cairo.

Abu Jalil, Mohammad, M., & Akel, I. (2021). The Economical Feasible Study. Amman: Dar Ghaida' for Publication and Distribution.

Abu Zayd, F. R. B. (2021). Usage of Target Cost Method for the Purpose of Cost Reduction in the Oil and Gas Companies in the Libyan Arab Jamahiriya in Light of Environment Development and Quality Requirements, a Master Thesis, Arab Academy for Financial and Banking Sciences, Amman, Jordan.

Adams, J., Khan, T. A., Raeside, R. & White, D. (2007) *Research Methods for Graduate Business and Social Science Students.* London: Response Books. https://doi.org/10.4135/9788132108498

Adem, A. Y. L. İ. N. (2022). A fuzzy decision-making analysis to make just in time compatible with the green ergonomics concept. *International Journal of Environmental Science and Technology*, *19*(6), 4749-4762.

Adeyemi, S. L. (2021). Just-in-Time Production Systems (JITPS) in Developing Countries -The Nigerian Experience. J SocSci, 22(2), 145-152.https://doi.org/10.1080/09718923.2010.11892795

Adeyemi, B. (2011). Bank failure in Nigeria: A consequence of capital inadequacy, lack of transparency and non-performing loans? Banks and Bank Systems, 6(1), 99–109.

Adler, R., Everett, A., & Waldron, M. (2019). Advanced Management Techniques in Manufacturing Utilization, Benefits and Barriers to Implementation, Accounting Forum, 1, 131-150.

Agasisti, T., Arnaboldi, M., & Azzone, G. (2008). Strategic management accounting in universities: The Italian experience. *Higher Education*, *55*(1), 1–15. https://doi.org/10.1007/s10734-006-9032-6

Ajibolade, S. O. (2013). Drivers of choice of management accounting system designs in manufacturing companies in Nigeria. *Global Journal of Accounting*, 3(1), 132–149.

Ajibolade, S. O. (2010). Empirical evidence of the usage and benefits of management accounting techniques in Nigeria companies. Knowledge Review, 21(3), 69–79.

Ajibolade, S. O. Arowomole, S. S. A., & Ojikutu, R. K. (2010). Management accounting systems, perceived environmental uncertainty and companies' performance in Nigeria. *International Journal of Academic Research*, 2(1), 195–201.

Al-Bishtawi, Z. A. K., & Al-Matarneh, S. O. (2019). The Limit of Administrative Accounting Contribution in the Emergence of Commercial Banks. Al-Manarah Journal, 19(4), 257-296.

Al-Htaybat, K., & Alberti-Alhtaybat, L. V. (2013). Management accounting theory revisited: Seeking to increase research relevance. *International Journal of Business and Management*, 8(18), 12–24.

Al-Mawali, H., Zainuddin, Y., & Nasir Kader Ali, N. (2012). Customer accounting information usage and organizational performance. *Business Strategy Series, 13*(5), 215–223. https://doi.org/10.1108/ 17515631211264096

AlMaryani, M. A. H., & Sadik, H. H. (2012). Strategic management accounting techniques in Romanian companies: Some survey evidence. Procedia Economics and Finance, 3, 387–396.

Alnawaiseh, M. A. L. I. (2013). The extent of applying strategic management accounting tools in Jordanian banks. *International Journal of Business and Management*, 8(19), 32–44.

Al-Nashar, T. (2016). The Relationship between the Added Costs Frame and the Indicators of non-Suitability Cost System, a Proposed Frame, an Applied Study. *The Journal of Commerce Faculty of Scientific Researches, Cairo,* 41(1), 283-335.

Al-Nsour, S., & Ali, A. K. (2016). The Impact of Using Modern and Traditional Administrative Accounting Methods on Profitability in the Public Industrial Companies Ltd enrolled in Amman Fund Market- an Analytical Study. a PHD Thesis, the Islamic Sciences University, Jordan.

Al-Tarawneh, B. M. (2015). The Strategic Role for Applying the Costs' System Based on the Activities Basis (ABC): a Field Study in the Medicine Industrial Companies working in Jordan. a PHD Thesis, Al-Jinan University, Tripoli, Lebanon.

Ali, H. (2016). Advance Administrative Accounting, Al-Dar Al-Jami'iyyah, Alexandria, Egypt.

Amoako, T., Huai Sheng, Z., Dogbe, C.S.K. & Pomegbe, W.W.K., (2022). Effect of internal integration on SMEs' performance: the role of external integration and ICT. *International Journal of Productivity and Performance Management*, *71*(2), 643-665.

Arunruangsirilert, T., & Chonglerttham, S. (2017). Effect of corporate governance characteristics on strategic management accounting in Thailand. *Asian Review of Accounting*, *25*(1), 85–105. https://doi.org/10.1108/ ARA-11-2015-0107

Aziz, A. M. (2012). Strategic role of strategic management accounting towards enhancing SMEs performance in Iraq (Unpublished Masters Thesis). University Utara Malaysia.

Björnenak, O. & Olson, A. (2019). The Efficiency Extent of Target Cost Role in the Increase of Competitive Ability of Commercial Bank Services- an Analytical Study. *Commercial Research Journal, 3*(1), 34-51.' Burhan, J. M. (2023). *Transforming Leadership: A New Pursuit of Happiness*. New York, NY: Grove Press.

Bromwich, E., & Bhimani, K. (2019). Advanced Management Techniques in Manufacturing Utilization, Benefits and Barriers to Implementation, Accounting Forum, 1, 131-150.

Bromwich, M. (1990). The case for strategic management accounting: The role of accounting information for strategy in competitive markets. *Accounting, Organizations and Society, 15*(1-2), 27–46.

Bryman, A., Teevan, J. J., & Bell, E. (2009). Social Research Methods. 2nd Canadian Edition. *Don Mills, ON: Oxford University*.

Cadez, S., & Guilding, C. (2007). Benchmarking the incidence of strategic management accounting in Slovenia. *Journal of Accounting and Organizational Change*, 3, 126–146.

Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, Organizations and Society, 33*(7–8), 836–863.

Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society, 28*, 127–168.

Cinquini, L., & Tenucci, A. (2007). Is the adoption of Strategic Management Accounting techniques really "strategy -driven"? Evidence from a survey. *Munich Personal RePEc Archive*, 1–27.

Camp, R.C. (2021), Benchmarking: The Search for Industry Best Practices that Lead to Superior Performance, ASQC Quality Press, Milwaukee, WI.

Chartered Institute of Management Accountants. (2008). Retrieved from http://www.cimaglobal.com.

Chenhall, M., & Euske, L. (2018). The effect of Applying the Production Cost System in the Specified Time (JIT) on the Operational Performance in the Jordanian Industrial Companies. *(Administrative Sciences) Studies Journal, the University of Jordan- Jordan, 34*(2), 299-317.

Collier, P., & Gregory, A. (1995). Strategic management accounting: A UK hotel sector case study. *International Journal of Contemporary Hospitality Management, 7*(1), 16–21.

Cravens, K. S., & Guilding, C. (2001). An empirical study of the application of strategic management accounting techniques. *Advances in Management Accounting, 10,* 95–124. 23(4), 245–260.

Cuganesan, S., R. Dunford, & I. Palmer. (2019). "Strategic Management Accounting and Strategy Practices Within a Public-Sector Agency." *Management Accounting Research 23:* 245–260.

Dixon, R. (1998). Accounting for strategic management: A practical application. *Long Range Planning*, *31*(2), 272–279.

Dixon, R., & Smith, D. (1993). Strategic management accounting. *Omega*, *21*(6), 605–618.

Doktoralina, C., & Apollo, A. (2019). The contribution of strategic management accounting in supply chain outcomes and logistic firm profitability. *Uncertain Supply Chain Management*, *7*(2), 145–156. https://doi. org/10.5267/j.uscm.2018.10.010.

Drury, C. (2002). Management and cost accounting (5th ed.). London: Thomson. Fu, Y. (2007). Strategic cost management in e-supply chain. *Asia-Pacific Management Accounting Journal*, *2*(1), 89–119.

Duci, E. (2021). The relationship between management accounting, strategic management accounting and strategic cost management. *Academic Journal of Interdisciplinary Studies*, *10*(5), 376. https://doi.org/ 10.36941/ajis-

Eisenhardt, M. (2020), "A practical approach to benchmarking in three service industries", Total Quality Management, Vol. 11 Nos 4/5&6, pp. S623-30.

Fakhre, N., & Al-Dulaimi, K. (2012). Industrial Cost Accounting, International Scientific House for Publication and Distribution, and Dar Al-Thaqafa for Publication and Distribution, Amman, Jordan.

Filman, H. (2020), “Manufacturing masters its ABCs: activity-based costing can help boost profits”, *Business Week,* No. 3693, p. 86.

Fornell, C. & Larcker, D.F., 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.

Frempong, M. F., & Adu-Yeboah, S. S. (2021). Impact of corporate sustainability and supply chain partnership towards firm performance: empirical evidence from Ghana’s manufacturing sector. *Journal of Finance and Economics*, *9*(5), 161-169.

Ghunaimi, S. M. A. (2018). The Efficiency Extent of Target Cost Role in the Increase of Competitive Ability of Commercial Bank Services- an Analytical Study. *Commercial Research Journal, 3*(1), 34-51.

Ghosh, B.C. & Chan, Y.K. (1996). “Management accounting practices in Singapore: the state-of-the-art”, unpublished manuscript, Nanyang Business School, Singapore.

Green, A. (2015). The advantages of an interview over a questionnaire. Retrieved from ⟨http://www.ehow.com⟩.

Guilding, C., Cravens, K. S., & Tayles, M. (2000). An international comparison of strategic management accounting practices. *Management Accounting Research, 11*(1), 113–135.

Hair Jr, J., Hult, G. T., Ringle, C., & Sarstedt, M. (2016). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). In *Sage*.

Haldma, T., & Laats, K. (2002). Influencing Contingencies on Management Accounting Practices in Estonian Manufacturing Companies. *Management Accounting Research, 13*(4), 379–400.

Hamid, F. A. H., & Mansour, F. E. H. (2016). The Impact of Target Costing System on Enhancing Company's Performance.

Hartmann, F. G. H., & Moers, F. (2003). Testing contingency hypotheses in budgetary research using moderated regression analysis: *A second look. Accounting, Organization and Society*, 28, 803–809.

Hassan T. (1995), Understanding research in education, Merrifield Publication Ltd; Lagos.

Hilton, R.W. (2018). Managerial Accounting: Creating Value in a Dynamic Business Environment, (5th ed.). McGraw-Hill Irwin, New York, NY.

Horngren, C. T., Sundem, G. L., & Stratton. W. O. (2021). Introduction to Management Accounting. Upper Saddle River: New Jersey, Prentice Hall.

Hürlimann, C. (2019). Research Philosophy and Ethics. In *Valuation of Renewable Energy Investments* (pp. 111-126). Springer Gabler, Wiesbaden.

Humphreys, K. A., Gary, M. S., & Trotman, K. T. (2016). Dynamic decision making using the balanced scorecard framework. *The Accounting Review*, *91*(5), 1441-1465.

Hutaibat, K. A. (2011). Value chain for strategic management accounting in higher education. *International Journal of Business and Management, 6*(11), 206–218.

Hyde, P. (2000). Managing across boundaries: identity, differentiation and interaction, *International Journal of Innovation and Learning*, *3*(4), 349-362. https://doi.org/10.1504/IJIL.2006.009560.

ICAN Study Pack, K. A. (2010a). Business communications and research methodology. Lagos: VI Publishers.

ICAN Study Pack, K. A. (2010b). Management accounting. Lagos: VI Publishers.

Imeokparia, L., & Adebisi, S. (2014). Target costing and performance of manufacturing industry in south-western nigeria. *Global Journal of Management and Business Research: D Accounting and Auditing*, *14*(4), 50-58.

Islam, J., & Hu, H. (2012). A review of literature on contingency theory in managerial accounting. *African Journal of Business Management,* 6 (15), 5159–5164.

Jankuwics, D. (2020). *Business Research Project*. London.

Jaradat, Z. A. K., & Al-Shubayl, S. O. (2018). The Limit of Administrative Accounting Contribution in the Emergence of Commercial Banks. *Al-Manarah Journal,* 19(4), 257-296.

Jassem, S., Azmi, A., & Zakaria, Z. (2018). Impact of sustainability balanced scorecard types on environmental investment decision-making. *Sustainability*, *10*(2), 541.

Jbarah, S. S. (2018). The impact of strategic management accounting techniques in taking investment decisions in the jordanian industrial companies. *International Business Research*, *11*(1), 145-156.

Juras, A. (2014). Strategic management accounting – what is the current state of the concept? *Economy Trans Disciplinarily Cognition, 17*(2).

Jawad, S. M., & Al-Rifaie, H. O. (2020). The Role of Appropriate Costs in Rationalizing the Operational Decisions, an Applied Study in Al-Furat Public Corporation for Chemical Industries. *Babil University Journal, Humanitarian Sciences*, *18*(1), 1-13.

Jensen, L.S. & Meckling, S.J. (1976), "How benchmarking goes wrong (and how to do it right)", *Planning Review, 21*(1), 6-11.

Joudeh, T., Innes, J., Mitchell, F., & Masayasu, T. (2021). Target Cost, Chapter Four, Contemporary Cost Management, Chapman and Hall.

Kalkhouran, A. A. N., Nedaei, B. H. N., & Rasid, S. Z. A. (2017). The indirect effect of strategic management accounting in the relationship between CEO characteristics and their networking activities, and company performance. *Journal of Accounting & Organizational Change*, *13*(4), 471–491. https://doi.org/10.

Kaplan, R., & Norton, D. (2005). Measuring the Strategic Readiness of Intangible Assts. Harvard Business Review.

Kato, Y. (2020). Target Costing Support System: Lesson from Leading Japanese Companies. *Management Accounting Research, Japan, 4*(1), 33-46. https://doi.org/10.1006/mare.1993.1002

Kee, R. (2019). The Sufficiency of Target Costing for Evaluating Production- Related Decision. *International Journal of Production Economic, 126*(2), Augest, 204-211.https://doi.org/10.1016/j.ijpe.2010.03.008.

Kim, J., C. Hatcher, & C. Newton. 2012. "Professional Identity of Management Accountants: Leadership in Changing Environments." *CIMA Research Executive Summary Series 8*(1): 1–20.

Kothari C. R. (2004). *Research Methodology, Methods and Techniques*, New Delhi: New Age International Publishers.

Kumar, A., Antony, J. & Dhakar, T.S. (2020), "Integrating quality function deployment and benchmarking to achieve greater profitability", Benchmarking*: An International Journal, 13*(3), 290-310.

Lachmann, M., Knauer, T., & Trapp, R. (2013). Strategic management accounting practices in hospitals: Empirical evidence on their dissemination under competitive market environments. *Journal of Accounting Organizational Change, 9*(3), 336–369.

Langfield-Smith, K., & Parker, L. (2008). Strategic management accounting: How far have we come in 25 years. *Accounting, Auditing and Accountability Journal, 21*(2), 204–228. https://doi.org/10.1108/ 09513570810854400.

Lee, J. M., Chen, I., Chen, R. C., & Chung, C. H. (2002). A target-costing based strategic decision support system. *Journal of Computer Information Systems, 43*(1), 110-116.

Lord, B. R. (1996). Strategic management accounting: The emperor's new clothes? *Management Accounting Research, 7*(3), 347–366. https://doi.org/10.1006/ mare.1996.0020.

Lucas, B. M. (2019). The Strategic Role for Applying the Costs' System Based on the Activities Basis (ABC): a Field Study in the Medicine Industrial Companies working in Jordan. a PHD Thesis, Al-Jinan University, Tripoli, Lebanon.

Lukka, K. (2010). The roles and effects of paradigms in accounting research. *Management Accounting Research, 21,* 110–115.

Marlina, E., & Tjahjadi, B. (2020a). Strategic management accounting and university performance: A critical review. *Academy of Strategic Management Journal, 19*(2), 1–5.

Masudin, I., & Kamara, M. S. (2018). Impact of just-in-time, total quality management and supply chain management on organizational performance: A review perspective. *Jurnal Teknik Industri, 19*(1), 11-20.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.

Milne, J. (1999). Questionnaires: Advantages and disadvantages. Retrieved from ⟨http://www.icbl.hw.ac.uk⟩.

Moores, K. (1992). Strategic features of management accounting systems: An examination of the relationship between practice, research, and education. School of Business Discussion Papers, 1–29.

Musbah, A. Y. S. (2010). The Role of individual variables, organizational variables, and moral intensity dimensions in accountants' ethical decision making: A study of management accounting in Libya (Ph.D. dissertation), Retrieved from ⟨http://www.ethos.bl.uk⟩.

Nguyen, T. M., & Nguyen, T. T. (2021). The application of strategic management accounting: Evidence from the consumer goods industry in Vietnam. *The Journal of Asian Finance, Economics and Business*, *8*(10), 139– 146 https://www.koreascience.or.kr/article/ JAKO202127335615024.pdf.

Nixon, B., & Burns, J. (2012). The paradox of strategic management accounting. *Management Accounting Research, 23*(4), 229–244.

Ogunleye, G. A. (2010). Perspectives on the Nigerian financial safety-net. Abuja: Nigeria Deposit Insurance Corporation.

Oluyinka, C., Lamminmaki, D. & Drury, C. (2021), "Budgeting and standard costing practices in New Zealand and the United Kingdom.*" International Journal of Accounting, Vol. 33* No. 5, pp. 569-88.

Okoye, E., & Akenbor, C. O. (2008). Strategic management accounting practices in a competitive environment: Theoretical exposition. *ABSU Journal of Management Sciences, 4*(2), 1–18.

Okpara, G. C. (2009). A synthesis of the critical factors affecting performance of the Nigerian banking system. *European Journal of Economics, Finance and Administrative Sciences*, 17, 34–44.

Otley, D. T. (1980). The contingency theory of management accounting: Achievement and prognosis. *Accounting, Organizations and Society*, *5*(4), 413–428.

Phornlaphatrachakorn, K. (2019). Influences of strategic management accounting on firm profitability of information and communication technology businesses in Thailand. *International Journal of Business Excellence*, *17*(2), 131–153. https://doi.org/10.1504/ IJBEX.2019.097540.

Podsakoff, P.M., MacKenzie, S.B. & Podsakoff, N.P., 2012. Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, *63*, 539-569.

Punch, K. F. (2020) *Developing Effective Research Proposals*. London: Sage Publications.

Rickwood, C. P., Coates, J. B., & Stacey, R. J. (1990). Stapylton: Strategic management accounting to gain competitive advantage. *Management Accounting Research*, *1*(1), 37–49.

Robson, C. (2002). *Real world research: a resource for social scientists and practitioner – Researcher*. Oxford. Blackwell Publishing.

Robson, C. (2020). *Real world research: a resource for social scientists and practitioner – Researcher*. Oxford. Blackwell Publishing.

Roslender, R. (1995). Accounting for strategic positioning: Responding to the crisis in management accounting. *British Journal of Management*, 6 (1), 45–57.

Roslender, R., & Hart, S. J. (2003). In search of strategic management accounting: Theoretical and field study perspectives. *Management Accounting Research*, *14*(3), 255–279.

Roslender, R., & Hart, S. J. (2010). Strategic management accounting: Lots in a name. No. 1005. Accountancy Research Group. Heriot Watt University.

Sakurai, M. (2021). Target Costing and How to Use It. *Journal of Cost Management, 3*(2), 39-51.

Salem, I. A. (2015). Studies in Economics, Dar Beit-al-Hikmah for Publication and Distribution, Baghda.

Sanusi, L. S. (2010). The Nigerian Banking Industry: what went wrong and the way forward. A Convocation Lecture delivered at the Convocation Square, Bayero University, Kano, on Friday, 26 February 2010.

Saunders, M., Lewis, P. & Thornhill, A. (2012). *Research Methods for Business Students.* Pearson Education Ltd., Harlow.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for business students* (Fifth). Pearson Education Limited.

Scapens, R.W. (2019), Management Accounting: *A Review of Contemporary Developments, Macmillan Education Ltd, London*.

Scapens, R., & Bromwich, M. (2001). Management accounting research: The first decade. *Management Accounting Research, 12*, 245–254.

Scapens, R., & Bromwich, M. (2010). Management accounting research: 20 years on. *Management Accounting Research, 21*(4), 278–284.

Schroeder, R. G. (2020). Operation Management, McGraw-Hill Book Company, New York. The Annual Statement of Amman Financial Market, for the year 2016.

Shank, J. K. (1989). Strategic cost management: New wine or just new bottles? *Journal of Management Accounting Research*, 1, 47–65.

Shank, J. K., & Govindarajan, V. (1992). Strategic Cost Management – The Value Chain Perspective. *Journal of Management Accounting Research*, *4*, 179–197.

Shank, J. K., & Govindarajan, V. (1993). Strategic cost management: The new tool for competitive advantage. New York: Free Press.

Shaqqour, O. F. (2020). Impact of vertical and horizontal integration between strategic management accounting and decision-making on reducing financial failures case of Jordan. *Academy of Accounting and Financial Studies Journal*, *24*(5), 1–9 https://www. abacademies.org/articles/Impact-of-Vertical-and- Horizontal- Integration-Between-Strategic- Management-1528-2635-24-4-581.pdf.

Shea, C. M., Jacobs, S. R., Esserman, D. A., Bruce, K., & Weiner, B. J. (2014). Organizational readiness for implementing change: A psychometric assessment of a new measure. *Implement Science, 9*(7), 1–15.

Simmonds, K. (1981). Strategic management accounting. Management Accounting (UK), 59(4), 26–29.

Simmonds, K. (1982). Strategic management accounting for pricing: A case example. Accounting and Business Research, 12(47), 206–214. https://doi.org/10.1080/00014788.1982.9728809.

Taipaleenmaki, J., & Ikaheimo, S. (2019). On the convergence of management accounting and financial accounting - The role of information technology in accounting change. *International Journal of Accounting Systems, 14*(4), 321-348.

Theresa Libby, Steven E Salterio, & Alan Webb. (2020). The Balanced Scorecard: The Effects of Assurance and Process Accountability on Managerial Judgment. *The Accounting Review. Sarasota*, 79(4), 20-41.

Tillmann, K. (2003). Strategic management accounting and sense making: A grounded theory study. (Doctoral dissertation). Retrieved4/3/2014 from ⟨http://www.ethos.bl.uk⟩.

Tillmann, K., & Goddard, A. (2008). Strategic management accounting and sense making in a multinational company. *Management Accounting Research, 19*(1), 80–102.

Tomkins, C., & Carr, C. (1996). Editorial in special issue of management accounting research: Strategic management accounting. *Management Accounting Research, 7*(2), 165–167.

Vu, T. K. A., Dam, B. H., & Ha, T. T. V. (2022). Factors affecting the application of strategy management accounting in Vietnamese logistics enterprises. *Journal of Distribution Science, 20*(1), 27–39

Wahyudi, I. (1999). Mainstream accounting and its paradigm: A critical analysis. Gadjah Mada *International Journal of Business, 1*(2), 99–112.

Wegmann, G. (2019). Compared Activity – Based Costing Case Studies in the Information System Departments of Tow Groups In France; A Strategic Management Accounting Approach. *International Conference on Business and Information, 7*(1), 72-93.

Weiner, B. J. (2009). A theory of organizational readiness for change. Implementation Science, 4(1), 67.

Yin, R. K. (2019). *Case study research: Design and methods* (3rd Ed.). Thousand Oaks, CA: Sage.

Yoshikawa, T., Innes, J., Mitchell, F., & Masayasu, T. (2019). Target Cost, Chapter Four, Contemporary Cost Management, Chapman and Hall.

Zaher, H. (2016). The Role of Financial Feasibility Study in making the Investment Decision: A Study of Investment Loan case at the Algerian National Bank for the period 2010-2013, Qasedi Mirbah University, Waraqlah, Algeria.

APPENDIX

QUESTIONNAIRE

Dear respondent,

*Please could you spend some few minutes to complete this questionnaire? The purpose of the study is to "*to assess the effects of strategic management accounting practices on decision making of selected manufacturing companies in Ghana*". This is entirely an academic activity. You are entreated to respond to the questions sincerely since any information provided will strictly be kept confidential. Kindly respond to the* questions by ticking (√) the appropriate response applicable in your case. There is no right or wrong answer.

SECTION A: DEMOGRAPHICS

1. ***Firm Age:***

   Less than 5 years [ ] 5-10 years [ ] 11-15 years [ ] 16-20 years [ ] Above 20 years [ ]

2. ***Firm Size***

   Below 20 employees [ ] 20-40 employees [ ] 41-60 employees [ ]

   61-80 employees [ ] 81-100 employees [ ] Above 100 employees [ ]

3. **Leverage**

   Lowly Geared [ ] Moderately Geared [ ] Highly Geared [ ]

SECTION B: BALANCED SCORECARD

4. Please indicate the extent to which you agree with the following statements regarding your firm's usage of balanced scorecard in measuring organisational performance in relation to its long term goals. Respond using a Likert scale of: ***1=Strongly disagree, 2=Disagree, 3=Indifferent, 4=Agree and 5=Strongly agree.***

Code	**Balanced Scorecard (adapted from Jbarah, 2018)**	**1**	**2**	**3**	**4**	**5**
BSC1	Our firm clarifies its strategy to the shareholders and determines its strategic goals clearly.					
BSC2	Our entity cares for performance measurements to accomplish its works					
BSC3	Our organisation coordinates between the individual and organizational performance.					
BSC4	Our firm has a clear plan to achieve the strategic or tactical goals and to facilitate the process of preparing the annual budget.					
BSC5	Our firm is interested in performance measurement operations and the connection of the short-term operational control with a long-term vision and strategy					
BSC6	Our entity translates its strategy into specific goals, target measurements and standards and initiatives for continuous improvement.					
BSC7	Our firm communicates the strategy to all the employees and spreads the organizational change and learning.					
BSC8	Our entity attempts to harmonize the individual goals and the division's goals with its strategy.					
BSC9	Our firm seeks to increase the administrative harmony among the workers and to build organizational knowledge to help them improve their abilities.					

SECTION C: TARGET COSTING

5. Please indicate the extent to which you agree with the following statements regarding your firm's usage of target costing. Respond using a Likert scale of: ***1=Strongly disagree, 2=Disagree, 3=Indifferent, 4=Agree and 5=Strongly agree.***

Code	**Target Costing (adapted from Jbarah, 2018)**	**1**	**2**	**3**	**4**	**5**
TAC1	Our entity allocates specific expenses annually for research and development.					
TAC2	Our firm has other geometric designs for products to ensure the required technical specifications.					
TAC3	Our entity's actual products are tested after production to provide high quality and suitable prices for clients.					
TAC4	Our organisation's operation engineering is designed in a way that leads to reduce costs and provides new models in the future					
TAC5	Our firm's production process is managed in a way that reduces the costs of products.					
TAC6	Our firm predicts demand and studies the market to determine the appropriate prices.					

SECTION D: JUST-IN-TIME SYSTEMS

6. Please indicate the extent to which you agree with the following statements regarding your firm's usage of Just-In-Time Systems. Respond using a Likert scale of: ***1=Strongly disagree, 2=Disagree, 3=Indifferent, 4=Agree and 5=Strongly agree.***

Code	**Just-In-Time Systems (adapted from Jbarah, 2018)**	**1**	**2**	**3**	**4**	**5**
JIT1	Our firm delivers customers' requests on time					
JIT2	Our firm reduces the size of stock storage					
JIT3	Our firm purchases raw materials and components as and when needed for production					
JIT4	Our organisation uses production control cards					
JIT5	Our entity purchases stock with quantities appropriate to the size of production.					
JIT6	Our organisation produces goods according to specific orders					

SECTION E: DECISION MAKING

7. Please indicate the extent to which you agree with the following statements regarding decision making of your organisation. Respond using a Likert scale of: ***1=Strongly disagree, 2=Disagree, 3=Indifferent, 4=Agree and 5=Strongly agree.***

Code	**Decision Making (adapted from Jbarah, 2018)**	**1**	**2**	**3**	**4**	**5**
DCM1	Our firm takes investment decisions that generate maximum benefits					
DCM2	Our organisation makes informed decisions on whether to make product in-house or outsource					
DCM3	Our organisation makes informed decisions on whether to add or drop a product line					
DCM4	Our firm makes informed decisions on special order					
DCM5	Our organisation makes informed decisions on limiting factors					
DCM6	Our organisation makes informed decisions on the number of units to produce and sell to break-even					
DCM7	Our organisation makes informed decisions on the number of units to produce and sell to achieve target profit					

END OF SURVEY

THANK YOU FOR YOUR TIME!!!