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Investigation of impact of Management Accounting Practice on Financial Performance of Manufacturing Companies in Gaborone, Botswana

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Abstract
This study aimed at examining the impact of management accounting practices on performance of manufacturing firms in Botswana. The study use a quantitative research approach and data was collected from four big manufacturing firms of Botswana in different sectors food processing, construction etc. A sample of 40 participants was purposely selected from managers and accounting personnel from selected firms. The statistical package for the social science (SPSS) version 25.0 and regression model were used to analyze data. Regression analysis was taken to check the relationship between management accounting practices and performance. The study showed that costing system, budgetary system, performance evaluation system, strategic management and information for decision-making are the key management accounting practices mostly adopted by manufacturing companies in Botswana and these management accounting practices positively influence the performance of manufacturing companies in Botswana. The study then recommends that most of these management accounting practices has to be adhered to if managers want to increase performance.

Key words: Management Accounting, Financial Performance, Manufacturing firms, Botswana

1.0 Introduction

This study focuses on investigation of impact of management accounting practices on financial performance of manufacturing companies in Botswana with selected big four companies. These companies are; Senn foods, Bokomo, PPC Botswana and Kgalagadi Breweries, Botswana. Management accounting practices are vital in organization's evaluation performance as it includes assessment of varied data sources in organizations (Ittner and Larcker, 2017). Further stated that effective management accounting practice helps in providing valid and accurate information for decision-making in organizations. It is vital for corporate organizations in any industry to implement management accounting practices effectively for improved economic performance as they help investors to make proper decisions regarding investment options and share value for companies registered on stock exchange (Kiesler and Sproull, 2012). This section of study shall provide background of study,

background of manufacturing industry, statement problems and research questions. It shall also look at research objectives, significant of study, conceptual clarification and literature review.

1.1 Background

Companies use management accounting techniques to evaluate their operations. This includes budgeting, variance analysis and break-even analysis. These methods help organizations plan, manage, and control operating costs and achieve profitability. Management accounting practices are recognized as critical to organizational success (Horngren, et al., 2009). Management accounting is the use of a company's historical economic data and projected economic It is the application of appropriate techniques and concepts to the processing of data.

Managerial accounting, or management accounting, is a set of practices and techniques aimed at providing managers with financial information to help them make decisions and maintain effective control over corporate resources. These include the methods and concepts necessary for effective planning, decision making (choosing among alternative business actions and controlling through the evaluation and interpretation of performance.

Thompson, Strickland, and Gamble (2019) believe that adopting management accounting techniques can provide companies with a sustainable competitive advantage over their competitors. Management accounting practice has evolved from reporting historical information, particularly analysis of variance, to participating in an organization's strategic planning process (Kiesler and Sproull, 2012). Ittner and Larcker (2017) argue that organizations can gain an edge in an increasingly demanding and competitive business environment that requires the adoption of innovative management accounting practices. Therefore, management accountants, especially those in the manufacturing sector, must be at the forefront in finding and developing innovative competitive strategies that enable organizations to remain profitable and competitive. These measures are especially important in the manufacturing industry, where efficiency and cost effectiveness can be used as competitive tools for growth and profitability. Studies in other countries have shown that despite developments in management accounting theory, practices have not changed as firms still prefer to use traditional management accounting tools (Uyar, 2010).

1.1.1 Botswana Manufacturing Company

Botswana's manufacturing industry is dominated by subsidiaries of multinational corporations. Players fall into the following categories as shown in the Botswana Manufacturers Association list: Food and Beverage Processing, Wood Products, Meat and meat products, Cement and Textiles, (Association of Manufacturers, 2013). Manufacturing contributes significantly to the economy, contributing 10% of GDP, 12.5% of exports and 13% of formal employment (Statistics Botswana, 2019). Botswana is a popular destination for investors looking to invest in manufacturing.

One of Africa's best producers of beef and minerals, specifically diamond, a fairly diversified financial services sector, and reliable telecommunications system. There are various direct and joint venture investment opportunities in manufacturing, such as processing, garment manufacturing, auto parts

assembly, electronics, plastics, chemicals, pharmaceuticals and metal engineering products for domestic and export markets (Statistic Botswana, 2019).

A number of key target areas have been identified and specific targets have been set to guide the growth of the industry. These include the development of special economic zones (SEZs), industrial parks and industrial clusters, promotion of SME manufacturing enterprises, development of niche products, commercialization of R&D results, and strategic attraction of strategic investors. Sectors such as steel industry, cement production, agricultural processing, machine tools and machinery, automobile assembly, spare parts production. According to Major et al. (2015) total factor productivity appeared to have increased by 7% between 1999 and 2002, but this estimate also remained statistically zero.

Projects are designed and implemented as part of a public-private partnership (PPP) to facilitate the development of the target area (Uyar, 2010). Key sub sectors of Botswana's manufacturing industry that have recently seen increased demand include galvanized steel, cement, beer and flour. All of these increased production from 2013 to 2015, cement in particular being a good indicator of economic activity (Ittner and Larcker, 2017). On the consumer goods side, locally manufactured goods include stationery and personal care products. According to the Botswana Manufacturers Association (2010), the majority of Botswana manufacturing companies, previously using traditional allocation methods, are slowly adopting modern models of overhead allocation techniques. Most use activity-based costing, which we consider superior to other overhead allocation techniques. However, they lack the expertise to implement modern overhead allocation techniques.

1.2 Research problem

The Botswana accounting profession has grown exponentially by adopting IFRS and IAS as accounting and auditing standards. Over the years, the challenge of containing costs to achieve better performance has been pervasive for most companies, especially those listed on the Botswana Stock Exchange, and pressure has been put on them by shareholders to outperform. Given the overall economic situation in Botswana, poorly performing companies do not attract investors as they are looking for companies that can bring in wealth. Management accounting provides the best opportunity for businesses to compete in the marketplace in order to provide consumers with the highest quality products and services at affordable prices. Most of the existing research literature on accounting in manufacturing enterprises in Botswana tends to be directed towards research on the financial accounting sector, the introduction of information technology, and credit accessibility in manufacturing enterprises, and further relates to the impact on management. These previous studies on the financial performance of manufacturing firms in accounting practices (Wairegi, 2011), (Makau, Wawire, & Ofafa, 2013), (Waweru, 2012), (Mugambi, 2010) Research studies are very important, but management is lacking. Lack of accounting practices and technical skills for decision-making are also obstacles to the development of manufacturing companies, as is lack of access to credit (Mbogo, 2011). Therefore, this study sought to determine the impact of management accounting practices on the financial performance of manufacturing companies in Botswana.

1.3 Research Objectives

The overall objective of this study was to examine the impact of management accounting practices on the financial performance of Botswana's manufacturing companies.

1.3.1 Specific Objectives

1. Establish what type of management accounting practices to be followed by manufacturing companies in Botswana
2. Determine the impact of management accounting practices on financial performance.
3. Explore challenges faced in implementing management accounting practices in manufacturing companies.
4. Recommend solutions to challenges faced in implementing effective management accounting practice in manufacturing companies.

1.4 Research Questions

1. What management accounting practices should be followed by manufacturing companies in Botswana?
2. What is the impact of management accounting practices on financial performance?
3. What challenges are faced in implementing management accounting practices in manufacturing companies?
4. Which strategies can be used to resolve challenges faced in implementing effective management accounting practice in manufacturing companies.

1.5 Hypothesis of the study

H1: Management accounting practices have no impact on organization's financial performance.
H2: Management accounting practices have a positive significant impact on organization's financial performance.

1.6 Significant of the study

This study complements the theory of management accounting in developing countries by focusing on the practices of Botswana manufacturing firms. This study shows whether manufacturers still prefer traditional tools, or if there have been more developments in theory than in practice. The research will also benefit various other companies in Botswana. They understand how to manage costs and what tools are available. The recommendations provided help businesses improve their operations. The study will also benefit scholars and scholars especially interested in the study of accounting and management accounting, as it provides a basis for other studies.

1.7 Conceptual clarification

Management accounting practice- Gamble, (2019) defined them as systems that enable firms to generate information for budgeting, reporting and controlling, measuring performance, and costing products and services that in turn assists in managerial decision making

Financial performance- According to Barton & Gordon, (2018), is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues

Manufacturing company- Otley and Berry, (2018), defined as any business that uses raw materials, parts, and components to assemble finished goods.

1.8 LITERATURE REVIEW

1.8.1 Theoretical Review

A theoretical assumption or justification is required to evaluate the relationships between the various elements of study variables and changes are taking place at any time hence need to make necessary adjustments to the system. For this reason, the study adopted institutional theory and contingency theory in its research hypothesis. These theories help develop important structures and interrelationships between the proposed concepts.

1.8 1.1. Institutional theory of organization

Institutional theory of organization is an adaptive framework for change processes which are investigating the effect of external environmental factors and market conditions for organizational change and development (Burnett & Carroll, 2015). Institutional theory relies heavily on social constructs to define and support structures and organizational processes (Scott, 2001). Institutional theory, using Burns and Scapens (2010), conceptualizes changes in management accounting as changes to organizational rules and routines. In institutional economics (OIE) theory, management accounting is understood as routine and implicit. Institutionalized management accounting practices are shaped and can be shaped by governing bodies in organizational activity. The OIE has three dichotomy that provide insight into the relationship between management process and change accounting which are: (1) Formal vs. informal change. Revolutionary change and evolutionary change. And (3) Regressive and Progressive Change (Burns & Scapens, 2010). Burns and Scapens (2010) The formal versus informal dichotomy of change is best suited to explain the relationship between them, management accounting and organizational change. Theoretical assumptions underlying the first dichotomy provide a correlation between the level of management accounting practice and the organization performance. This provides theoretical concepts underlying one of the objectives of the study which focuses on identifying the manufacturing accounting practices adopted by these firms. This theory is relevant because it suggests that managers in the accounting department need to change their accounting systems at different levels so as to adapt to changes taking place, external environmental factors. When there is change in market behavior of manufacturing companies the system must change to suit the situation and maximize collection of revenue and reduce costs. For example if due to economic recession customers are not able to service their accounts, the accounting system must be able to adjust and change at different levels and reduce costs due to increase in unpaid accounts by introducing cash payment.

1.8.1.2 Contingency Theory

Contingency theory assumes that there is a good match between organizational characteristics and contingencies. Increases organizational effectiveness (Morton & Hu, 2018). However, in contingency theory there is no generally accepted organizational model that accounts for diversity. Organization system design from one organization to another. This may be related to organizations operating in different industries and geographies. Otley (2008) applies contingency theory to management accounting practice. There is no single accounting practice that applies to all organizations. Therefore he explains that basically every organization has its own management accounting practices. Accompanied by

specific influence factors that assist management in making appropriate management accounting decisions. These factors are either technological changes or organizational infrastructure. An urgent perspective suggests that an effective management accounting system must match both. Internal and external factors (Battilana & Casciaro, 2012). Internal factors can be compared to ownership, similar in structure or management and key personnel. External factors can be likened to technological change, competition and market forces. Therefore, the purpose of this study is to empirically examine the validity of contingency centers. The theorem that organizational performance depends on the suitability of organizational context and structure. Contingency theory is relevant to this study because it is of paramount importance in explaining how accounting systems work in changing environments, be it technical or economic changes. It is influenced by the compatibility of environmental and tissue factors.

1.8.3 Determinants of performance in the manufacturing industry

Analyzing the determinants of a company's financial performance is essential for all stakeholders, but especially important for investors. Shareholder value, defined as the market value of a company, depends on several factors. The company's current profitability, risks, and economic growth. These are important to the company's future interests. These are all important factors that affect the market value of manufacturing companies.

Branch (2010), on the other hand, argues that financial measures based on accounting information are sufficient to determine shareholder value. A manufacturing company's financial performance is directly impacted by its market position. Profitability can be broken down into its main components.
Net sales and net profit margin. Ross et al. (2016) argue that both can affect a firm's profitability at some point. If high sales mean better utilization of a company's assets and greater efficiency, high profit margins mean that the company has significant market power. increase.

Risk and growth are two key factors that influence a manufacturing company's financial performance. The market value depends on the performance of the company, so the market value can change depending on the level of risk. Economic growth is another factor that contributes to a better position in financial markets. This is because the market value also takes into account expected future profits. A company's size can have a positive impact on its financial performance, as large companies can use this advantage to gain financial advantages in their business relationships(Otley and Berry, 2018) . Large companies have easy access to key production factors, including human resources. Additionally, larger organizations often receive cheaper funding. Classical theory holds that in a world of perfect competition, capital structure is irrelevant in measuring firm performance, because performance is affected only by real-world factors.

Recent research contradicts this theory by arguing that capital structure plays an important role in determining firm performance. Barton & Gordon (2018) postulate that high winning firms have low leverage because they can fund their own funding sources. On the other hand, high leverage increases the bankruptcy risk of the company. Total assets are believed to have a positive impact on a company's financial performance, with more assets meaning less risk. Higher sales volume (revenue) does not necessarily correlate with better performance. Studies that have looked at the relationship between sales and company performance have been inconclusive. The main purpose of the company has evolved over

time. The need for short-term profit is supplanted by the need for long-term growth (sustainable growth) of the company. Therefore, a sustained growth rate above 1 has a positive impact on performance. For listed companies, being able to pay dividends is a sign of stability. Management accounting information and analysis are essential to the management of manufacturing companies in Kenya as a discipline to move away from the passive role of informant to decision makers (Kibera, 2010). This changing trend has resulted in many notable innovators in management accounting. This is demonstrated by the implementation of innovative modern management accounting methodologies such as activity-based costing, strategic management accounting, just-in-time, lifecycle costing, and modern performance measurement systems such as the balanced scorecard. . As a result of these new developments, some researchers argue that related losses may be recovered in the near future. The resulting profits appear to be gradually passed on to Kenyan manufacturing companies.

1.8.3.1 Financial performance

Financial performance can be defined as a subjective measure of how well a firm is able to utilize assets from its core business to generate income (Mills, 2018). The term is also used as a general measure of a company's overall financial health over time and can be used to compare similar companies in the same industry or to compare industries and sectors in aggregate form. increase. The concept of performance measurement states that employees can add value to the company. Increasing the size of a firm's future cash flows by accelerating its receipt of future cash flows or by increasing the certainty of cash flows or reducing risk (Cadbury, 2012). There are many ways to measure finances, but all measurements must be done in aggregate. Measures of financial performance include return on equity, liquidity measures, wealth management measures, profitability measures, liability measures and market value measures.
Carreta and Farina (2010) argue that the use of financial performance may be justified as reflecting what management actually considers financial performance. Financial performance is determined by the following metrics: profit or added value; turnover, commission, budget; Cost and effort, stock market indicators (such as stock prices) and autonomy. Financial performance estimates also include financial KPIs. Return on Equity (ROE) and Return on Assets (ROA).

1.8.4 Management Accounting Practices used in companies

Management accounting practice helps an organization to survive in the competitive, ever-changing world, because it provides an important competitive advantage for an organization that guides managerial action, motivates behaviors, supports and creates the cultural values necessary to achieve an organization's strategic objectives. Management accounting is concerned primarily with the internal needs of management. It is oriented toward evaluation of performance and development of estimates of the future as opposed to traditional financial accounting which emphasizes historical data related to such legal financial matters as ownership, investment, credit granting, taxation, regulation, and the building of foundations for consistent and conservative external reporting, “in accordance with generally accepted accounting principles.” Flexibility is an essential characteristic of management accounting since it presupposes that careful attention has been given to determine the important needs of management, many of which cannot be precisely identified in advance (Parker, 2012). The Institute of Management Accountants (IMA) is the professional association of professional and academic management accountants and defines management accounting as “the identification, measurement, accumulation, analysis, preparation and interpretation of financial information used by management for planning and

evaluation. The process of communicating". , managed within the organization to ensure proper use and accountability of its resources. Management accounting also includes the preparation of financial reports for non-management groups such as shareholders, creditors, regulators and tax authorities" (Smith, 2009).

Management accounting provides management with information from its environment to facilitate decision making. Good management accounting information has her three characteristics: Technical - Provides a better understanding of the phenomena measured and related phenomena Information for Strategic Decision-Making, Behavior - Information that encourages behavior consistent with an organization's strategic goals, and Culture - Supports and/or creates a set of shared cultural values, beliefs and attitudes in an organization and society (Ashton et al., 1991). The development of management accounting responds to managerial and environmental demands. Management accounting adapts to organizational change, and three key forces drive organizational evolution: Technological change, globalization and customer needs (McWatters, 2011). To remain competitive in today's global marketplace, your business must continuously improve. Good management accounting practices help an organization to continuously improve. This is why so many management accounting tools and techniques have been developed and practiced around the world.

1.8.5 Impact of Management's accounting practices on financial performance

Ittner and Larker (2012) define management accounting practices as the various methods specifically considered by manufacturing companies to support their organizational infrastructure and management accounting processes. Management accounting practices include, but are not limited to, budgeting, performance evaluation, decision-making information, and strategic analysis. Ittner and Larker (2011) argued that the development of these new methods transformed the basic principles of management accounting into better ones that added value to a variety of practices. According to the literature, some practices such as absorption costing and marginal costing are not well liked by most companies. For example, Dugdale and Jones (2012) emphasized the limitations of these cost accounting systems. These cost accounting systems do not precisely provide a way to accurately record costs in order to make informed business decisions.

Management accounting practices enable management to obtain relevant information for meaningful decision making (Alleyne and Weekes-Marshall, 2011). Uyar (2010) found that the importance of cost accounting is driven by declining profitability, rising costs, increased competition, and economic crisis. The authors also noted that while organizations still attach importance to traditional management accounting tools, new management accounting practices such as strategic planning and transfer pricing are seen as less important than their traditional counterparts. I also mentioned that The study also found that the top three management accounting practices are budgeting, planning and control, and cost-volume-benefit analysis.

Many factors influence changes in management accounting practices in some organizations. Otley and Berry (2008) characterized some systems as open. This means that there is a continuous cycle of resources, inputs moving from the external environment. Such changes are generally believed to affect the selection of appropriate management accounting practices in any organization. Some researchers comment that such changes may be due to different frameworks of both economic and cultural environments. Most studies focus on changes in corporate accounting, mainly in countries such as South

Africa and Canada (e.g. Luther and Longden, 2011). However, some researchers have found that what is often taught in schools is so different in the workplace that it creates a knowledge gap between practice and theory. Johnson and Kaplan (1987)) argued that management accounting has not changed in recent years. But Libby and Waterhouse (2016) were convinced that change was taking place. Burnset et al. (2009) further argued that there is evidence that management accounting practices in developed countries such as the UK have changed over the past decade. It can therefore be concluded that, as Li and Yu (2012) noted, the impact of management accounting practices on financial performance is not as well documented in Botswana as it is in other developing countries.

1.8.6 Challenges faced in implementing effective management accounting practices

According to Barton & Gordon (2018), implementing effective management accounting practices proves to be a challenge in most organizations due to the fact that it requires large volumes of data which is obtained from different sources. Further reasoned saying that this causes the process to be too tedious hence most companies end up using only that information easy and close to them for performing management accounting functions leading to provision of substandard or results which are not a true reflection of what transpired in business. Otley and Berry, (2008) argued saying that it is unfortunate that effective management accounting practices are not affected in most organizations across all industries in the economy for they require in-depth expertise which is not readily available in many companies.

A study by Adler, Everett, and Waldron (2010) showed that most companies in Kenya's agriculture and manufacturing industries do not implement effective management accounting practices because of lack of relevant skills and competence among staff members. Abdel-Kader and Luther (2016) lamented the rate at which big organizations in Nigeria avoid implementing effective or standard management accounting practice arguing that they do not have enough funds to purchase all required systems or software hence resort to use of simple practices available.

Howell and Sukarai (2012) mentioned that there are challenges in selecting suitable software that will be used in implementing effective management accounting practices in organizations which affect organizations' management accounting processes hence performance. Choosing the accounting method that an organization will use is only part of the challenge faced by many companies in implementing effective management accounting practices (Otley and Berry, 2008) Adler et al. (2010), argued saying that one of the many challenges is that staff asked to implement this system does not have adequate accounting knowledge hence some companies rely on seeking help from external expertise such as consultants who they struggle to give all the data required.

Management accounting records depend on records provided by other people in the accounting field and mostly these records will not be accurate as most companies prefer hiring qualified and not experienced employees who are easy and cheap to pay compared to qualified and experienced management accountants. This affects the organizations' performance and effective implementation of management accounting practices.

1.8.7 Empirical research

In a comparative analysis of management accounting practices in Australia and Japan, Wijeywardena and Zoysa (2009) examined differences in the adoption of management accounting techniques through questionnaires sent to the top 1000 manufacturing companies in each country. Company size was based on balance sheet totals. A total of 217 Japanese and 231 Australian companies responded to 31 questions on various aspects of management accounting methodology. This analysis included a comparison of techniques in different cultural contexts. The main cultural differences identified in this study were in collective decision-making, unique corporate philosophies, use of SMEs as subcontractors, company-specific costing training for each employee, and different educational backgrounds of senior management. bottom.

The accountant I saw in Japan vs Australia. Based on responses, the profile (e.g. type, asset size, export ratio, annual sales, number of employees and nature of market competition) of the sample firms was tabulated in percentage terms. Other variables explored were; importance of management accounting tools, uses of cost accounting data, purposes of standard costing, investment appraisal methods, components of budgets, timings of budget, main overhead allocation bases, manufacturing cost structure, inventories as a percentage of total assets, quantitative techniques, performance evaluation measures, product costing methods, major participants in new product cost estimation, costing systems and significant changes to costing systems. Findings of the comparative survey revealed that management accounting practices of Australian companies placed emphasis on cost control tools (e.g. budgeting, standard costing and variance analysis) at the manufacturing stage while Japanese companies focused attention on cost planning and cost reduction tools such as target costing at the product planning and design stage. This finding is in agreement with another study of Howell and Sukarai (2012) that "Japanese companies seem to understand better than their western counterparts that cost should be managed and avoided during the product planning and product cycle stages rather than when products have entered full scale production".

Adler, Everett, and Waldron (2010) conducted a survey that asked accountants of manufacturing companies in New Zealand to indicate the technology used in their business. While much research has focused on specific techniques such as ABC and target cost calculations, Adler et al. Provided a survey with various questions. Management accounting techniques to provide a more comprehensive set of response options. They were asked to rank the controls on a scale of five, from most used to least used. A sampling method was chosen that provided 165 completed questionnaires to achieve a response rate of 19%. Traditional management accounting techniques such as full costing, direct costing, and standard costing are found to be more widely used than advanced management accounting techniques such as strategic management accounting. A study by Adler et al. (2010), Ainikkal (1993) and Hawkes et al. (2003) have conflicting studies on individual techniques. It has been noted that Australian companies adopt the ABC and cost of quality methodologies, and that larger companies are more likely to use modern accounting methods. Anand et al. (2014) investigated the reactions of 53 CFOs of Indian companies in a study on cost management practices in India. The purpose of their research was to capture the development of cost control practices such as overhead cost accounting, budget control applications and standard costing in Indian companies. The survey questionnaire also explored managers' motivations for implementing and using standard costing as a management tool between firms using activity-based cost management (ABCM) and firms using traditional cost accounting systems. We

aimed to examine significant differences between The study found that companies obtain accurate cost and profit information from the ABC Cost System for value chain and supply chain analysis. This result suggests that companies using ABC have better insight into benchmarking and budgeting. They use a costing system, but unlike companies that use traditional costing systems, the prioritization of budget targets is inconsistent. Abdel-Kader and Luther (2006) surveyed management accounting practices (MAP) in the UK food and beverage industry to understand the level of complexity of MAP and the factors that influence MAP implementation in this industry. . The research methodology used in this study was a questionnaire sent to 650 industry executives. A total of 245 available completed questionnaires were received and evaluated. Respondents were asked to indicate their frequency of use of the 38 Management Accounting Practices (MAPs) using a Likert scale (1 means not used at all, 5 means used very often). . There are also concerns about management's use of managerial accounting information to make decisions. This review indicates that the debate on management accounting practices is ongoing and therefore the impact of management accounting practices on the financial performance of manufacturing companies in Botswana needs to be examined.

2.1 Research design

A descriptive survey design was chosen for this study. Harrison (2018) articulates that descriptive survey is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. A descriptive research design has been adopted in order to achieve set research objectives. As the research design means the various methods suggested and recommended by the researcher to find solutions to the research problems, the use of quantitative approach will help to gain feedback from employees as they are associated with the research problem. This will provide an in-depth search and analysis of the participants' perception to gain an understanding of the impact of training and development on organizational performance. Qualitative approach will provide first hand support data to quantitative methods used on impact management accounting practice on financial performance in manufacturing companies in Botswana.

2.2 Population and Sampling

The target group for this study was 4 manufacturing companies in Botswana. A stratified random sampling method was used to determine the sample size. This was because the population was considered heterogeneous across manufacturing companies, meaning that a simple random sample would not be representative. According to Cooper and Schindler (2016), this ensures that all subsectors of the manufacturing sector are represented. According to Mugenda and Mugenda (2013), at least 10% of the target population is important for research. Therefore, 4 manufacturing companies in Gaborone participated in the survey.

Sector	**Number**	**Name**	**Sample %**
Construction	10	PPC Botswana	25
Food and meat processing	10	Senn Foods & Bokomo Botswana	25
Beverages	10	Kgalagadi Breweries	25
Food –Grocery	10	Bokomo	25
Total	**40**		**100**

Table 1. shows how the sample size was determined. Industry

2.3 Data Collection

This study collected primary data from respondents. The data collected were both quantitative and qualitative. Qualitative data are categorical measurements expressed through natural language descriptions rather than numbers. Quantitative data are numerical measurements expressed as numbers. In this study, a questionnaire was used to collect data. The questionnaire designed in this study consisted of two parts. The first part addressed demographic and operational characteristics to determine fundamental questions that included the demographic characteristics of respondents. Part 2 addressed questions related to the impact of management accounting practices on the financial performance of Botswana manufacturing companies. Secondary data were obtained from annual reports published over his five years (2018–2020) of a manufacturing company in Botswana.

2.4 Data Analysis

As this study was conducted using a mixed methods approach (defined in 'Study Design'), analyzes were performed using the Statistical Package for the Social Sciences (SPSS) and coding/theme. SPSS was used to enable researchers to present information in the form of tables and figures. A regression model shall be used on evaluating impact of management accounting practice on performance of manufacturing companies.

Model

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X3 + \varepsilon$

Y= Performance of manufacturing companies. X1: strategic management accounting, X2: costing system, X3: budgeting system and X4: Performance evaluation

β_0=Constant

ε = The error term

β_1 β_2 β_3 = Independent Variables' regression Coefficients

2.5 Reliability and Validity of data

Validity of instrument shall be obtained by incorporating comments from supervisor on question design for each of the study areas. Pre-test shall be done and 5 questionnaires shall be given at random to all categories, to check if answers given will be relevant to the study, if not adjustments will be done.

2.6 Ethical consideration

Before conducting the questionnaires and interviews respondents consent shall be sought. This included briefing the respondents about the research objectives and roles of the respondents and how they were going to benefit from the research. Respondents were assured about the degree of confidentiality in the information that they dispensed.

3.1Data Analysis

40 questionnaires were distributed to the population and 40 were received. After cleaning the data by carefully scrutinizing the data to ensure all questions were filled appropriately, giving this study a response rate of 100%. Thus 40/40* 100=100%. Response rate is calculated by dividing the number of usable responses returned by the total number eligible in the sample chosen

3.1 General Information

3.1.1 Gender

The respondents were asked to indicate their gender and the results are shown below. Figure 1.1 is indicative of the results obtained and shows that 70% of the respondents were female and 30% were male, thereby indicating that manufacturing companies have more female employees compared to male employees.

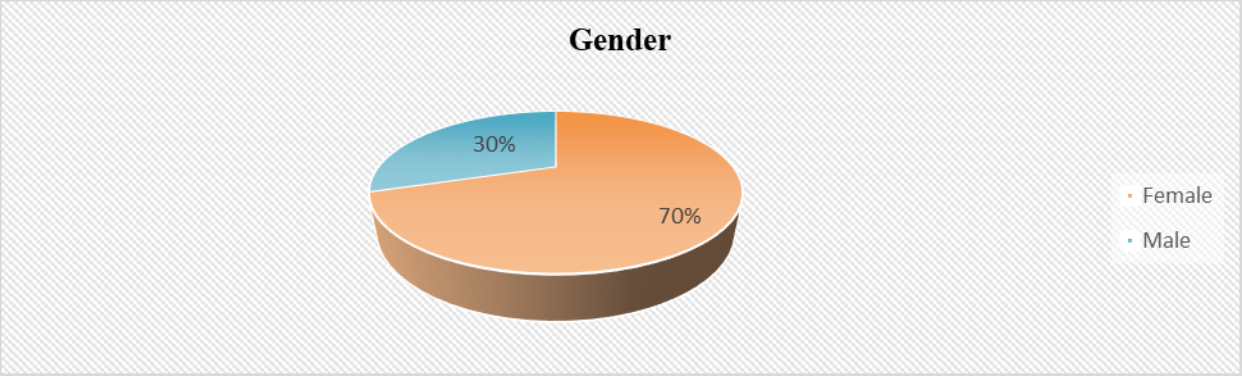

Figure 1.1 Gender of RespondentsSource: Survey Data (2023)

3.1.2 Age Group.

The respondents were asked to indicate the age group he belonged to and the results are as shown. Figure 1.2 shows that 10% of the respondents are below 25 years of age, 15% are between 25-30 years, 32% are between 31-40 years, 33% are between 46-50 years while 10 % are above 51 years of age. This shows that the majority of the respondents are aged between 46 and 50 years.

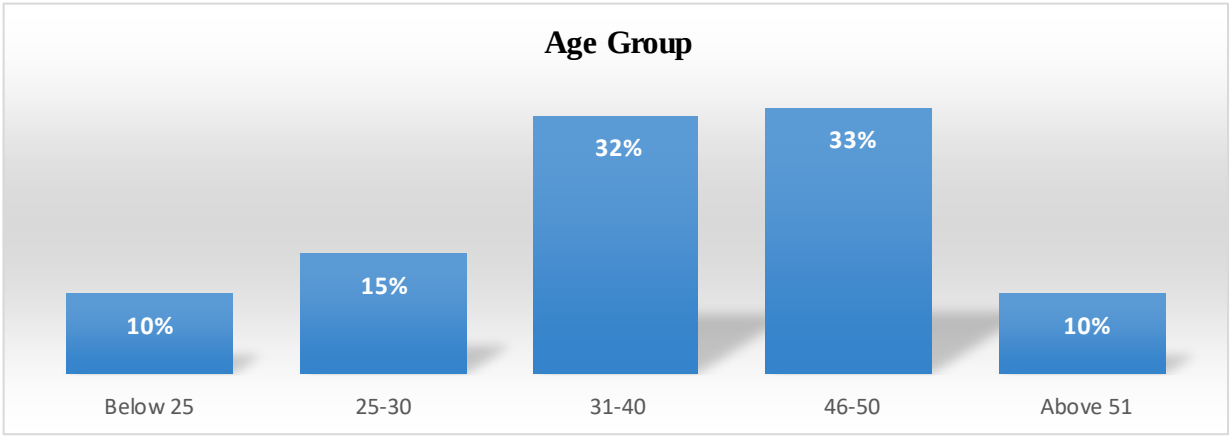

Fig 1.2 Age Group **Source: Survey Data (2023)**

3.1.3 Department

The respondents indicate the department they worked in and the results are shown below. Figure 1.3 shows that 8% of the respondents are HRD, 24% management, 16% are in sales, 12% are in bookkeeper, 12% in accounts, 16% accountants and 8% are in other departments namely marketing and credit control departments respectively. This shows that management has the largest department with 24% of the total respondents.

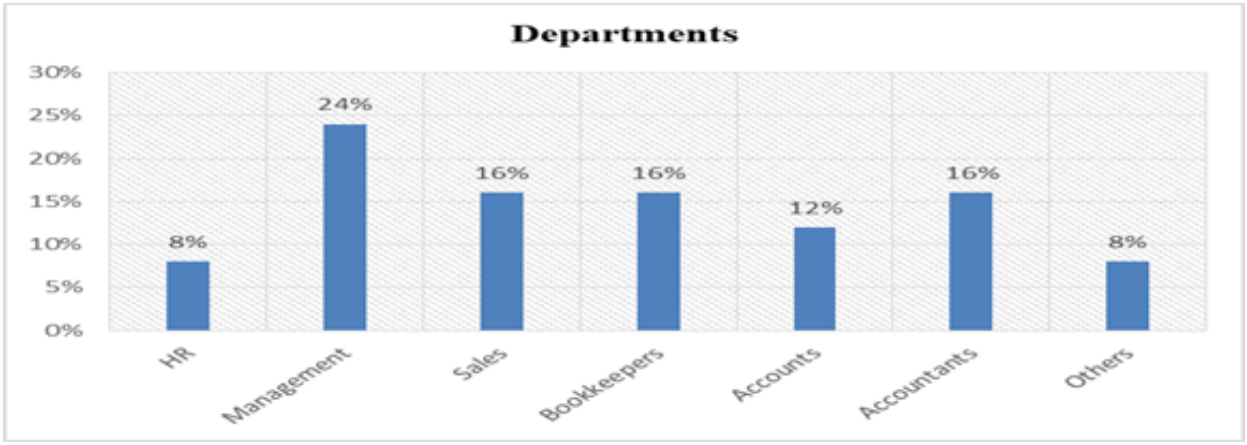

Fig 3.3 Departments

3.2.5 Experience

The respondents were asked to indicate the number of years they had worked in mine and the results are shown below. Figure 3.4 shows that 15% of the respondents have worked for less than one year, 25% have worked for 1-2 years, 32% have worked for 2-3 years, 20% have worked for 3-4 years and 8% have worked for 5 years and above. This shows that majority of the respondents have worked for 2-3 years.

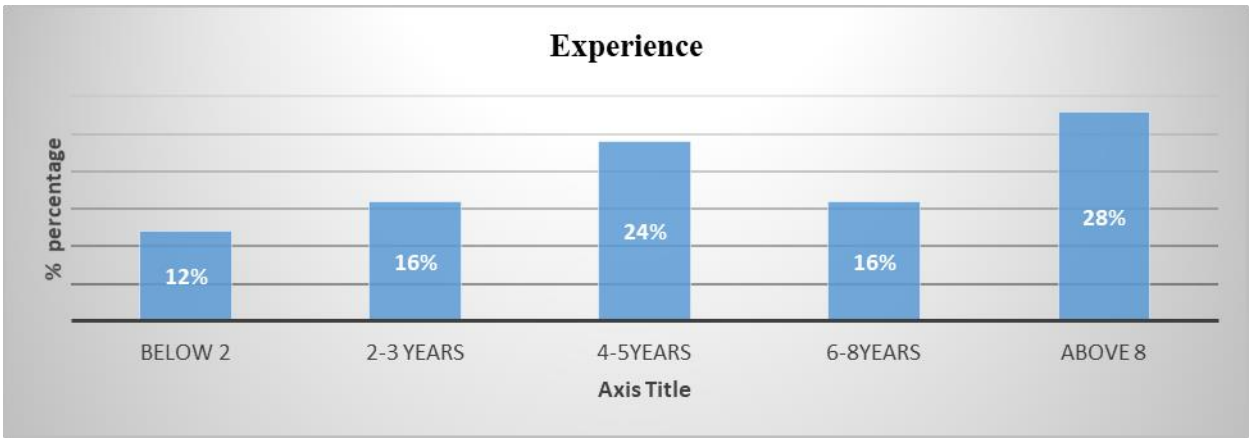

Fig 1.4 Experience

3.2 Discussion of findings

The respondents were asked for their responses using the scale 'SD=Strongly Disagree, D=Disagree, N=Not Sure, A=Agree, SA=Strongly Agree'. The results of the study were as follows:

3.2.1 Management practice which should be followed by manufacturing companies

3.2.1.1 Performance evaluation help in manufacturing companies

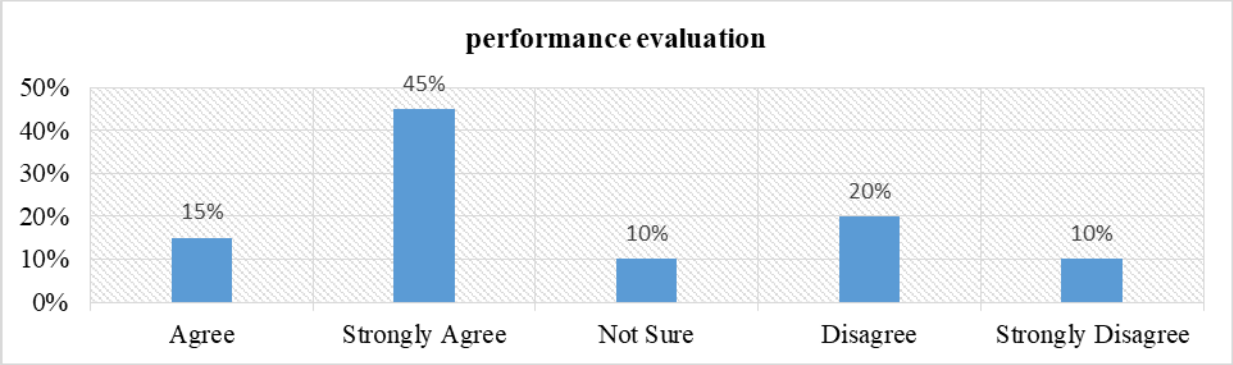

Fig 1.5: performance evaluation

The respondents were asked to indicate whether performance evaluation helps in manufacturing companies and the results are shown above. The graph shows that of all the participants, 10% strongly disagreed, 20% disagreed and 10% were not sure, 15% agreed while 45% strongly agreed. This indicates that a total of 60% of the participants agreed with the statement that performance evaluation is important practice in manufacturing companies' performance. This is because it helps in improving design making which improves business performance hence sales growth. Baird, (2017) stated that performance evaluation is vital as it provides information regarding planned and actual performance which lead to necessary adjustments be made for improved performance.

3.3.1.2 Effective financial reporting is vital in manufacturing companies

Table 3.1 Financial reporting

Response		Frequency	Percentage
	Strongly Disagree	9	22,5%
	Disagree	3	7,5%
	Not Sure	2	5%
	Agree	14	35%
	Strongly Agree	12	30%
	Total	**40**	**100**

Source: Survey Data (2023)

The respondents were asked whether effective financial reporting is vital in manufacturing companies' performance and their response showed that 22,5% strongly disagreed, 7,5% disagreed, 5% were not sure while 35% agreed and 30% strongly agreed. This showed that the majority agreed that effective reporting is important in the operation of manufacturing companies. This is because reporting helps in information sharing and enhances communication which leads to improved planning and effective management of the business. Barton, & Gordon (2018) argued saying that effective reporting provides information relevant for improved decision-making leading to improved business performance.

3.2.1.3 Costing system is not important in manufacturing companies

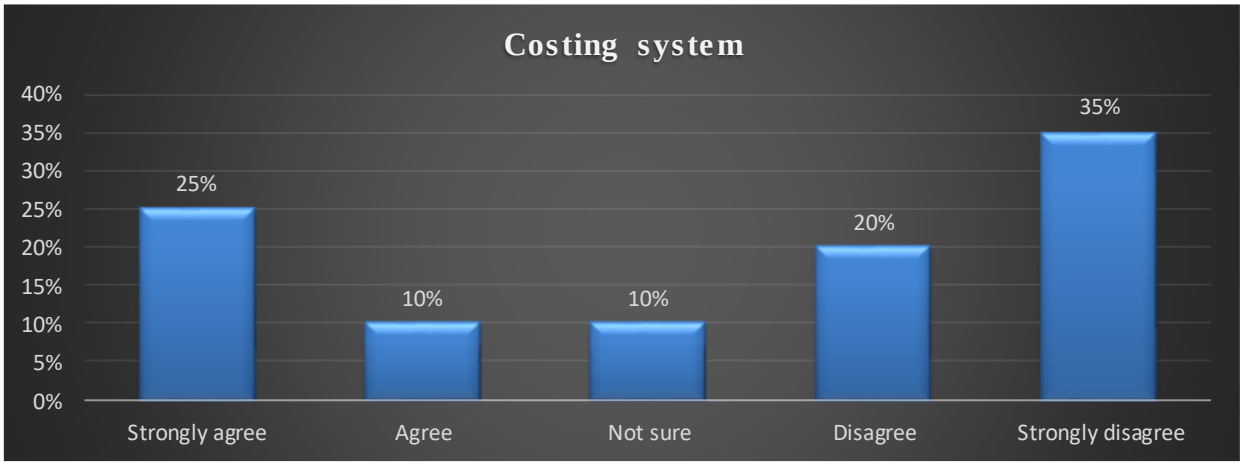

Fig 1.6: Graph –costing system

The respondents were asked whether the costing system is not important in manufacturing companies and their response showed that 25% strongly agreed, 10% agreed, 10% not sure and 20% disagreed while 35% strongly disagreed. This showed that the majority of the respondents disagreed with the statement meaning that the costing system is important in manufacturing companies. Costing systems help organizations to monitor their decisions as it enables effective balancing of facts and challenges. Liaqat (2016) stated that costs and benefit analysis is facilitated by an effective costing system which improves decision-making in an organization and fosters performance.

3.2.1.4 Budgeting system is valuable in operations of manufacturing companies

Table 2 Budgeting system

Response		Frequency	Percentage
	Strongly Disagree	8	20%
	Disagree	6	15%
	Not Sure	1	2,5%
	Agree	15	37,5%
	Strongly Agree	10	25%
	Total	**40**	**100**

Source: Survey Data (2023)

The respondents were asked if the budgeting system is valuable in operations of manufacturing companies and their response showed that 20% strongly disagreed, 15% disagreed and 2,5% were not sure while 37,5% agreed and 25% strongly agreed. This showed that based on statistics of findings, budgeting systems are valuable in operations of manufacturing companies. This is because budgeting facilitates planning and decision making leading to improved operation by manufacturing companies in Botswana. Arithi, (2011)argued that effective budgeting is vital in manufacturing companies mostly because they buy a lot of resources to support their operations and this needs management to balance their resources requirement.

3.2.2 Impact of management accounting practice on financial performance

The data collected was used to analyze the impact of management practice on financial performance of manufacturing firms in Botswana. Four management practices were considered: strategic management accounting, costing system, performance evaluation and budgeting system and their effects on financial performance such as level of productivity, product quality, sales growth and cash flow growth rate.

Coefficient of Regression Model:

Table 3 Significance of Independent Variables

Variables	Unstandardized Coefficients		Standard Coefficient	T	Sig
	B	Std Error	Beta		
(Constant)	2.820	.562		4.785	.000
Strategic management Acc	.650	.215	.687	4.810	.000
Costing system	.375	.250	.455	1.708	.000
Performance evaluation	.275	.1 85	.380	1.671	.001
Budgeting system	.227	.1 70	.315	2.086	.002

As per the table 4.1, the equation ($Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X3 + \beta 4\ X4 +$ becomes:

$Y= 2.820 +0.65\ X_1 +0.375X_2 +0.275X_3 +0.227X_4$

Where Y is the dependent variable the financial Performance in manufacturing companies.

X1: Strategic management accounting

X2: Costing system

X3: Performance evaluation

X4: Budgeting system

The regression equation above has established that taking all management accounting practices into account (strategic management accounting, costing system, performance evaluation and budgeting system). The results of the findings indicate that strategic management accounting significantly and positively influenced the manufacturing companies' performance in Botswana (β=0.650; t=4.810; p<0.05).

This implies for the manufacturing firms' performance to be enhanced, strategic management accounting should involve the identification of influencing factors which could negatively impact on the level of productivity, quality objective of manufacturing companies' performance. In other words, the management team should identify factors related to debt collection, control, organizing, recording and planning. All the steps of the strategic management accounting process should be included to deal with possible challenges that enhance the processes of strategic management accounting.

Further, costing system has a significant and positive effect manufacturing firms' performance in Botswana (β =0.373; t= 1.708; p=<0.05). This result indicates that where a highly capable accounting team / workforce is utilized, the effect of competency manpower in the manufacturing industry is visible in its end products. This is because they are directly involved in early realization of the accounting information completion since they handle the technical phase of such accounting skills. This has an implication that skilled accounting personnel help to raise efficiency, decrease accidents, less management, increase organization stability which in turn enhance the performance of manufacturing firms. On the other hand, the significance of more skilled accounting personnel cannot be ignored as

they have the possibility of reducing inefficiencies owing to poor business performance. This has an implication that profits and availability of skilled accounting personnel is considered a vital factor in the effectiveness of the manufacturing firms' financial performance.

Budgeting systems had a significant and positive effect in manufacturing companies' performance in Botswana (**β** =0.275; t= 1.671; p=<0.05). These results indicate that availability of adequate budget is considered to be a factor necessary for the successful completion of product development and resource acquisition. This budget helps to manage expectations and gives managers information to develop a cost/benefit for the production plan. However, it should be noted that premature depletion of resources can be caused by bureaucratic bottlenecks that lead to delays in resource requisition and delivery, hence sales growth. This could be attributed to poor communication and coordination between the management and organizational authority.

Performance evaluation had a significant and positive effect in manufacturing companies' performance in Botswana (**β** =0.227; t= 2.086; p=<0.05). This indicates that performance evaluation helps in information sharing and knowledge of past and present performance standards which help in developing detailed specifications and reduce the extent and impact of such errors and uncertainties as well as helping to streamline and standardize management accounting practices. Furthermore performance evaluation helps in improving communication, coordination and control of activities leading to improved performance hence business success.

3.2.3. Challenges faced in implementing Accounting practices

Table 4: Challenges faced

	Response	Frequency	%	Ranking
1	Poor implementation strategies	9	22,5%	3
2	Hiring of unqualified & inexperienced staff	12	30%	2
3	Use of unsuitable software	15	37,5%	1
4	Lack of resources	4	10%	4
	Total	**40**	**100**	

The findings of a questionnaire given to 40 participants regarding common challenges faced in implementing accounting practice in manufacturing companies in Botswana, 4 strategies were suggested and ranked accordingly. The results of the findings showed that participants suggested that use of unsuitable software is the most challenging affecting implementation of accounting practice. This is because unsuitable software is not effective to collect comprehensive data for effective accounting processing and management of all accounting processes leading to organizations' failure to implement standard accounting practices. Some of these software are not standard and are very simple adopted because they are cheap and are not compatible with other management accounting practices. They also suggested that hiring of unqualified and inexperienced accounting personnel is affecting implementation of effective management accounting practices with 30% and ranked 2nd. This is because unqualified and inexperienced staff do not have relevant expertise and in-depth knowledge of management accounting hence their skills do not support the required standard management accounting system. They suggested that this is caused by the fact that inexperienced staff are cheap to pay as they are not expensive and this

is affecting effective implementation of management accounting practices. The respondents also suggested that poor implementation strategies are also a challenge in implementing standard management accounting practices in manufacturing companies in Botswana with 22,5% and is ranked 3rd. This is because employees in accounting departments most of them are not suitably qualified and do not have relevant experience so there is no way they can manage to work with standard management accounting procedures and this is causing poor performance of manufacturing companies. They also suggested that manufacturing companies do not want to spend more on accounting systems citing lack of resources with 10% and ranked 4th. Unavailability of finance and qualified personnel who have relevant skills to support management accounting practices is a serious challenge in implementation of management accounting practices in manufacturing companies.

3.2.4 Strategies that can be used to resolve challenges.

3.2.4.1 Selecting and using suitable software.

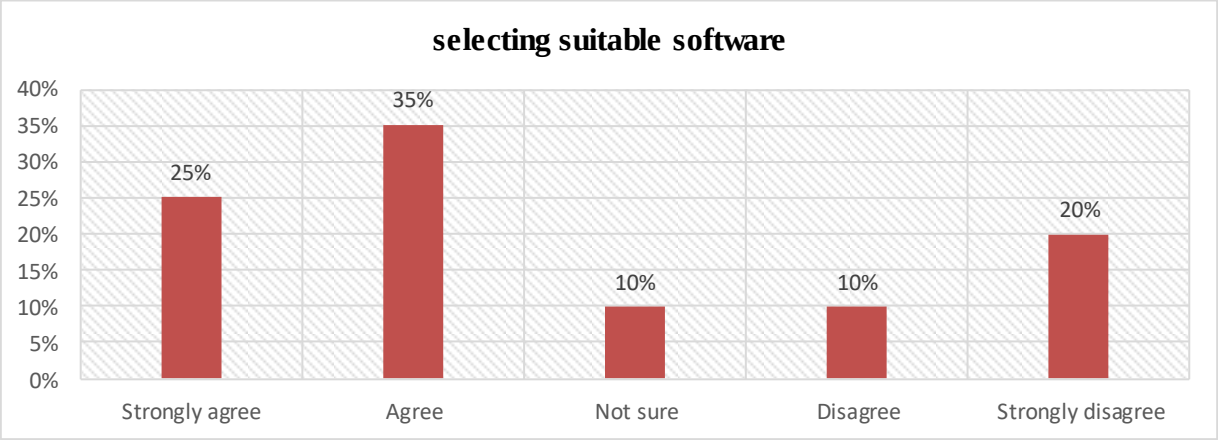

Fig 1.7: Graph-selecting suitable software

The respondents were asked whether selecting suitable software could help to improve or solve challenges faced by manufacturing companies in Botswana. The results of the findings are shown on the graph above, that 35% agreed, 25% strongly agreed and 10% were not sure while 10% disagreed and 20% strongly disagreed with the statement. They suggested that selecting suitable software will improve implementation of management accounting practices in manufacturing companies as it will be compatible with standard management accounting practices leading to improved performance. This will enhance the system's performance leading to improved financial performance by the organizations.

3.2.4.2 Hiring qualified and experienced management accountants.

Table 5 Hired Qualified Staff

Response		Frequency	Percentage
	Strongly Disagree	4	10%
	Disagree	6	15%
	Not Sure	2	5%
	Agree	16	40%
	Strongly Agree	12	30%

	Total	**40**	**100**

Source: Survey Data (2023)

The respondents were asked whether hiring qualified and experienced accounting staff can help to solve challenges faced and their responses were shown as above. 10% strongly disagreed, 15% disagreed and 5% were not sure while 40% agreed and 30% strongly agreed. This shows that the majority agreed that hiring qualified and experienced staff will help to improve challenges faced. They suggested that having relevant skills and competence will reduce common and costly errors faced leading to improved business performance. Qualified and experienced staff are an asset to every organization as they improve service quality and help to increase organization's productivity and success.

3.2.4.3 Effective implementation of management accounting practices

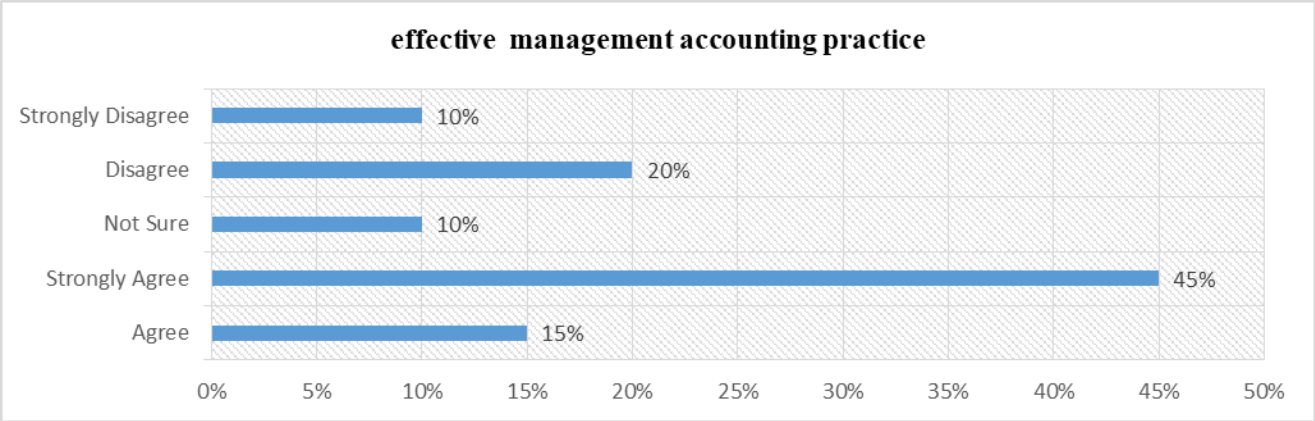

Fig 1.8: Effective management accounting practice

The respondents were asked if effective implementation of management accounting practice can solve the challenges being faced by manufacturing companies in Botswana. The findings showed that 10% strongly disagreed, 20% disagreed while 10% were not sure. 45% strongly agreed and 15% agreed giving a total of 60% of the respondents agreed with the statement showing that effective implementation of management accounting practice will help improve the situation. This is because effective implementation of such practices will lead to increased system efficiency, effectiveness and accuracy hence improved organizational performance, profitability.

3.3 Findings

The findings of the study indicated that different management accounting practices should be followed by manufacturing companies in Botswana. It suggested that practices such as budgeting systems, costing systems and performance evaluation are some of the important management accounting practices manufacturing companies need to implement in their operations. They need to include such practices as effective financial reporting and strategic management accounting.

The study also found out that management accounting practices have significant positive impact on financial performance of manufacturing companies in Botswana. It showed that the costing system, budgeting system, performance evaluation and strategic management accounting system have a significant impact on the financial performance of manufacturing companies in Botswana hence they need to be well practiced.

The findings showed that there are challenges faced in implementing management accounting practices in manufacturing companies includes hiring of unqualified and inexperienced accounting staff, poor implementation of management accounting practices and use of unsuitable software which hinder organizational performance. It also showed that certain strategies can be used to resolve challenges faced in implementing effective management accounting practice in manufacturing companies.

3.4 Conclusion

The study can conclude that there are certain management accounting practices which should be followed by manufacturing companies in Botswana and they have a positive significant impact on financial performance of these organizations. It also concludes that there are a number of challenges faced in implementing management accounting practices in manufacturing companies hence certain strategies can be used to resolve challenges faced in implementing effective management accounting practice in manufacturing companies such as hiring qualified and experienced staff as well as using suitable software.

3.5 Recommendations

The study recommends that manufacturing companies in Botswana need to hire qualified and experienced staff and acquire suitable software for their improved operation and better financial performance. They also need to effectively implement management accounting practices so as to improve their service quality and organization's productivity.

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