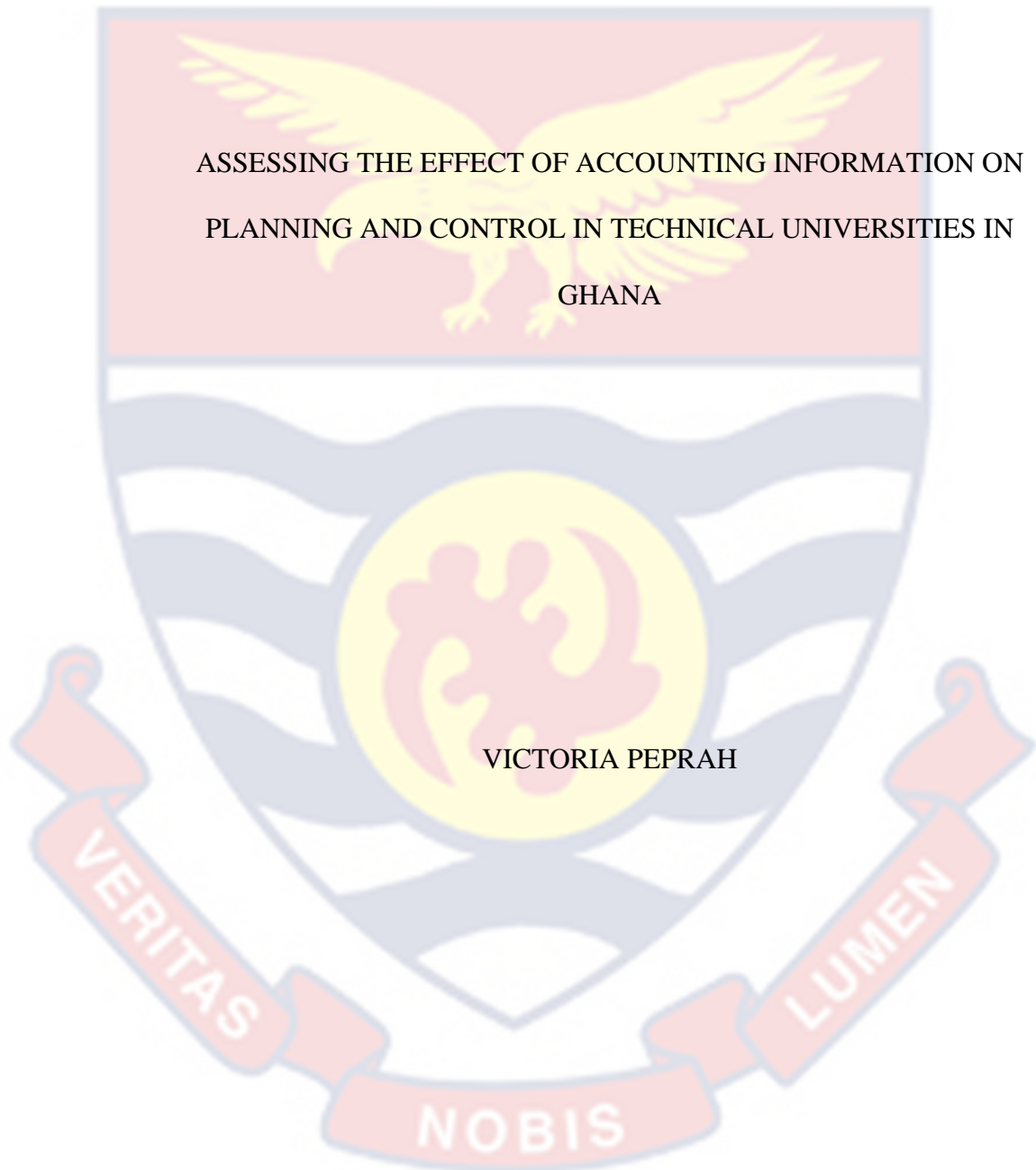


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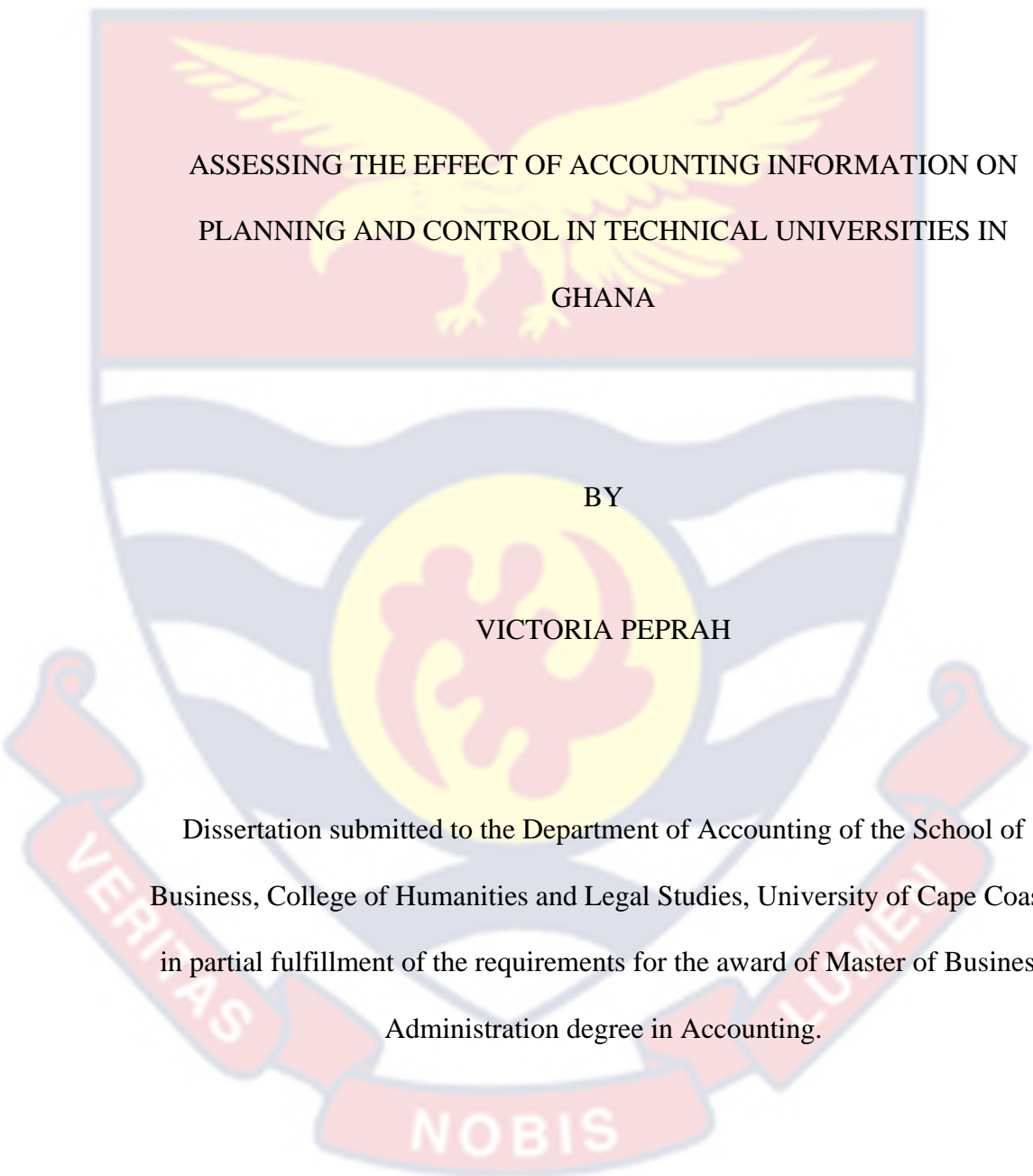


ASSESSING THE EFFECT OF ACCOUNTING INFORMATION ON
PLANNING AND CONTROL IN TECHNICAL UNIVERSITIES IN
GHANA

VICTORIA PEPAH

2023

UNIVERSITY OF CAPE COAST



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GHANA

BY

VICTORIA PEPRAH

Dissertation submitted to the Department of Accounting of the School of
Business, College of Humanities and Legal Studies, University of Cape Coast,
in partial fulfillment of the requirements for the award of Master of Business
Administration degree in Accounting.

MAY 2023

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:..... Date:.....

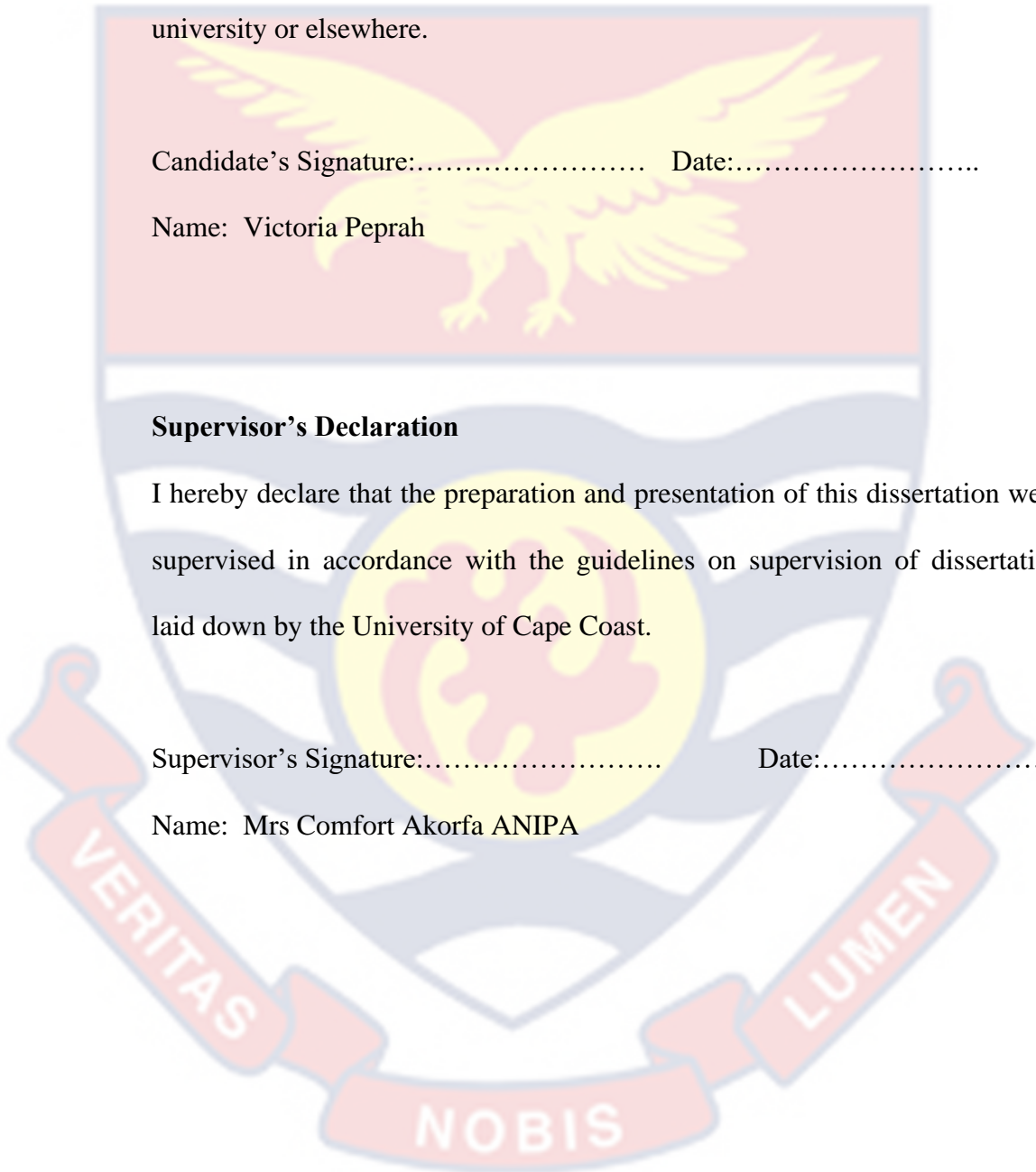
Name: Victoria Peprah

Supervisor's Declaration

I hereby declare that the preparation and presentation of this dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature:..... Date:.....

Name: Mrs Comfort Akorfa ANIPA



ABSTRACT

The study examines the effect of accounting information on planning and control in technical universities in Ghana. The study used an explanatory research design as well as a quantitative research approach relative to the research objectives. The proportionate random sampling techniques were employed to select 155 respondents from the accessible 260 population for the study. Descriptive statistical tools, such as mean and standard deviation; and inferential statistics, such as the regression analysis were used to analyze the research objectives. The results revealed that the respondents totally agreed to the existence of the characteristics of accounting information in their respective institutions. The study also revealed that accounting information had a positive and statistically significant effect on decision-making relative to technical universities in Ghana i.e. planning and control. The findings again revealed that respondents completely agreed to the statements regarding the challenges faced by these technical universities in their quest to keep accounting information. Based on the findings of the study, the researcher is safe to conclude that accounting information influences decision-making ie planning, and control. It was then recommended that Management of the technical universities should consider recruiting qualified accounts staff with the requisite skills and knowledge so that accounting information produced by these people can be trusted and be relied upon to make decisions.

KEY WORDS

Accounting Information

Decision Making

Planning and control



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DEDICATION

To my family



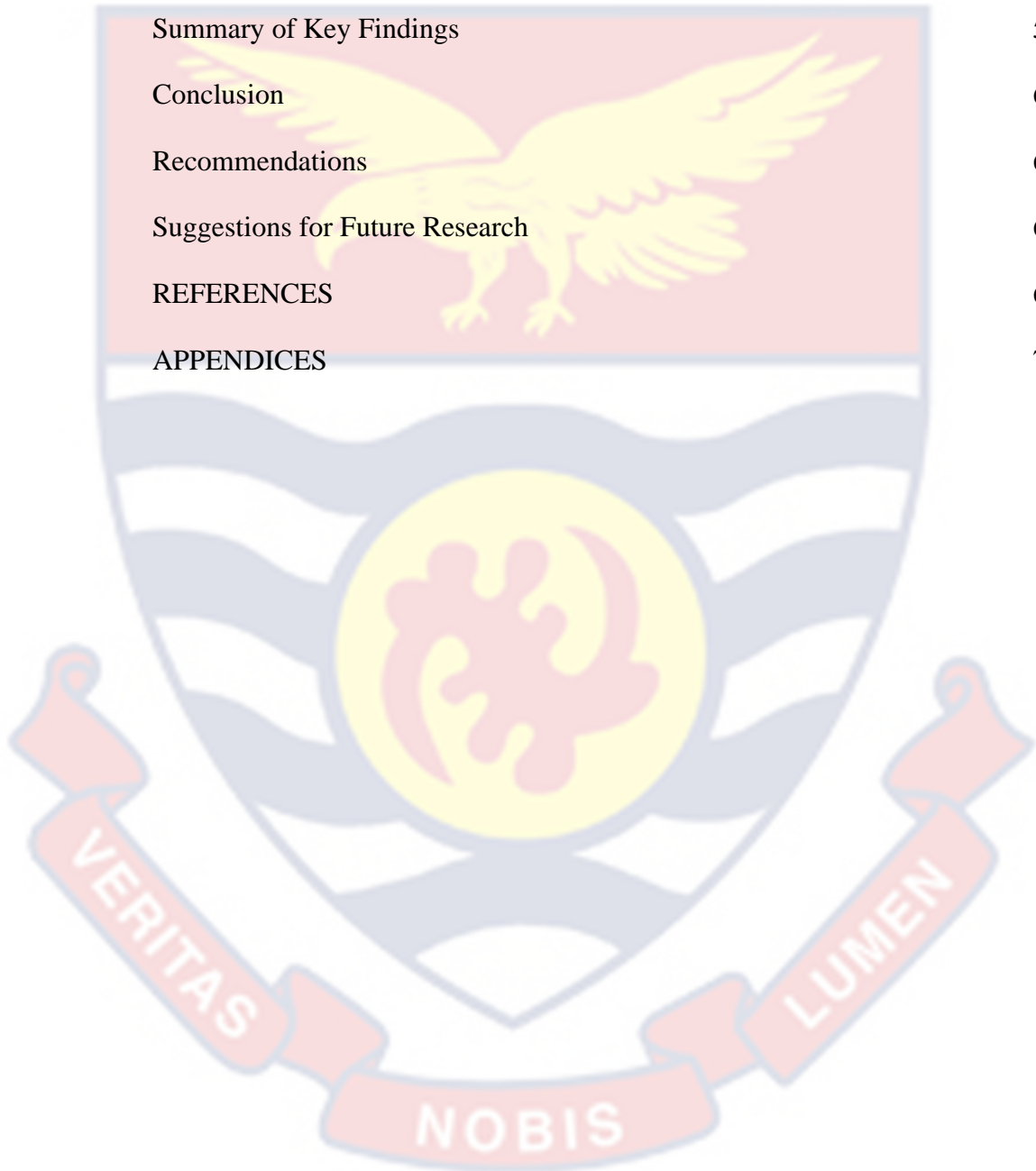
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CHAPTER ONE

INTRODUCTION

Background to the Study

The success of an organization is directly proportional to the managerial roles that are filled, including decision making. It is not possible for managers to minimize the significance of arriving at decisions through the use of a methodical decision-making process (Shahid, Rappon, & Berta, (2019). As a consequence of this, it is essential for managers to have the ability to make effective use of all of the information at their disposal, particularly the accounting information. The primary purpose of accounting information is to provide business managers, managers of organisations/ institutions and owners with guidance during the decision-making process (Halabi & Carroll, 2015). According to Akinlade (2019), accounting information is the language of business and the fundamental tool for recording, classifying, and summarizing in a helpful manner and in monetary terms, events and transactions that are of a financial character and the subsequent interpretation to the users of financial statement. The high quality of the accounting information is what determines the effectiveness and efficiency of the entity in terms of making appropriate decisions (Ayodele, & Olubunmi, 2020).

The information that is presented in accounting needs to be organized and presented in such a way that it will be helpful to users in making their individual decisions. The following are some of the defining characteristics that it must possess: relevancy, reliability, timeliness, understandability, and objectivity (Rikhardsson, & Yigitbasioglu,2018). In order to enhance the

credibility of the information and its utility in the process of decision-making, established concepts, principles, standards, and legal requirements are adhered to in a stringent manner. This allows for the translation of physical facts into monetary values, as well as the guarantee that all types of reports are integrated and prepared on a constituent basis (Inalegwu, 2018). When the information that is provided satisfies a significant number of the needs of the people who use the system, we refer to that information as being "vital." Since information is the most important factor in decision-making, it is imperative that it possess a certain set of qualities, among which are readability, dependability, timeliness, neutrality, comparability, and comprehensiveness. Only then can a decision maker hope to accomplish the objectives that are expected of them (Lartey, & Mensah, 2015).

According to Kanakriyah (2016), accounting information played an important role in the management of entities, and they provide the appropriate information for internal managers as well as external parties who are concerned. According to Asare, (2015) the company's information states that in today's modern business conditions, which are characterized by globalization and rapid market changes, making qualitative and quantitative business decisions requires having adequate, timely, and comprehensive accounting information.

Further, the act of determining a course of action after recognizing the need to do so, amassing relevant information, and weighing the relative merits of available options is referred to as decision making (Bruch & Feinberg 2017). Accounting information gives managers access to the information they require to do their jobs effectively. The management decision is one of the

most important aspects that pervade all institutions and constitute their success or failure in actualizing pre-determined goals and objectives. Management decisions are one of the most important aspects that pervade all institutions (Evans, & Simon, 2018). An institution's decision-making process is heavily influenced by the information it has at its disposal. To make a good decision, a person or organization must have access to a lot of good accounting information. An important role in managing an organization's operations is to make decisions. Most of the time, management relies on accounting data to make these choices (Emmanuel, Samuel, & Osei, 2018).

When it comes to making good business decisions, accounting information is a critical input that helps management perform their primary responsibilities of planning and controlling an enterprise. Financial and non-financial accounting information should be presented in a way that is easy to understand by a wide range of stakeholders. Individual and corporate survival depends solely on the quality of the decisions (right) it implements, as previously stated (La Torre, Sabelfeld, Blomkvist & Dumay, 2020). This decision is influenced by information provided to management by the company's accounting system. Accounting information presented in a manner that is accurate, detailed, and up-to-date is the product of a well-managed organization. Relevance, faithful representation, comparability, consistency, verification, timeliness, and understandability are some of the qualities needed for accounting information to be useful for decision making. For example, strategic, tactical, or operational decisions, managers can rely on financial and nonfinancial accounting information; however, careful execution is required in order to achieve organizational goals and objectives (Tetteh, 2013).

Again, management also plans future operations and sets short- and long-term goals. The department needs effective accounting information to help management develop achievable plans. Planning is involved whenever people meet to preview a task and coordinate their activities to complete it effectively (Ho, 2018). Planning and control are essential for any organization. Planning involves setting goals and communicating them to employees. The control function evaluates the organization's plan implementation. Planning is important in an organization because managers set goals that determine future activities and decisions. Thus, for a company to make good decisions, plan, and control its economic objectives, the accounting information considered must be of a high standard. This work explores the impact of accounting information on planning and control (Alawaqleh, 2021).

Furthermore, the controlling philosophy has resulted in shifts in the manner in which leadership is exercised as well as the make-up of decision-making levels. All those who are concerned with the achievement of the overarching goals that were established by a company's management are facing an increasingly difficult challenge (Sutherland, 2017). All of this constitutes an entirely novel perspective on accounting and other information-related activities carried out within a company. It is expected of them to do more than simply monitor previous business processes and states in order to calibrate and coordinate accounting-related business processes, as this is only the beginning of the list of their responsibilities. Consequently, controlling is an information activity that corresponds to accounting that is oriented toward decision-making (Benjamin, & Simon, 2017).

Horvat, and Mojzer, (2019) claimed that it is important to exclude controlling from the domain of accounting and advocated for the organization of a special controlling service, subordinated directly to the management of a company. Appiah (2017) criticized the reorganization of the information system by setting up a special controlling department in such a way and proposing an adjustment of accounting to modern requirements. The accountant typically possesses the most information and helps a company to monitor the implementation of business plans and enable determination of the deviations between the planned and the realized.

However, accounting, considered to be a key source of information about business performance, can help managers to develop knowledge about the organization's environment in several ways. It makes visible those events that are not perceptible by daily activities of a manager and provides an overall quantitative perspective on their work. (Gibson, Aldiss, Horstman, Kumpunen, & Richardson, 2016). Consequently, accounting information can reveal issues that are overlooked during ordinary daily activities and can provide an independent control over operations to help managers be aware, which allows the manager to determine the meaning and significance of all the operations (Socea, 2012).

Statement of the Problem

The use of accounting information has become a critical factor in changing organizational environments, such as manufacturing, banking, and especially the educational sector to effectively and efficiently make decisions. The major problem discovered for management is the identification of the fundamental concept of accounting information to be implemented by each

department which can affect the institution positively or negatively. Public institutions face the challenges of proper and adequate contemporary accounting information for management decisions. The institution itself tries to coordinate all these challenges effectively and efficiently so as to minimize any anticipated and unanticipated pitfalls, but the challenges still arise (Otley, 2019).

However, several studies have been conducted on accounting information and decision-making. Gacheru, (2017) studied the relationship that exists in accounting information that end up affecting the decisions made in the Sri Lankan manufacturing sector and found that accounting information has a statistically significant strong positive relationship with both marketing-linked strategic making of decisions and industrial-related strategic decision-making of companies operating in Sri Lanka's manufacturing sector. Ullah, Khonadakar, and Fahim, (2014) studied the role played by accounting information when making major decisions in manufacturing companies in Bangladesh and found that there is significant relationship that exists in strategic decisions and accounting information. Ali, Bakar, and Omar, (2016) studied how information from accounting guides management in making decisions in Malaysia and found that there exists a significant relationship.

Therefore, with respect to the studies by (Gacheru, 2017; Ullah, Khonadakar, and Fahim, 2014 & Ali, Bakar, and Omar, 2016) though similar to the current study but they were conducted outside the jurisdiction/geographical area of the current study which has different dynamics in terms implications. Further, studies were carried out with respect to manufacturing industries which is totally different from this study. These prior studies also

relied on qualitative data for their analysis and interpretation without taking cognizance of the quantitative aspect and the value it will add to their findings, hence a gap was created.

Closer home in Ghana, Oduro (2014) studied financial accounting information and financial performance in small and medium enterprises and the researcher found a positive and strong association between financial accounting information and performance. However, though the studies did have major contributions in significance and scope, they used other study variables as indicated above leading to a contextual/geographical gap and paucity in literature. It is, therefore, against this background that the current study examined the effect of accounting information on the planning and control of public Technical Universities in Ghana.

Purpose of the Study

The main focus of the study was to assess the effect of accounting information on planning and control in technical universities in Ghana.

Research Objectives

The following were the specific objectives of the study:

1. determine the characteristics of accounting information in Technical Universities in Ghana.
2. determine the effect of accounting information on Management's decision-making (planning and control) in the Technical Universities in Ghana.
3. assess the challenges Technical Universities encounter in keeping of accounting information.

Research Question

The following research questions were formulated to help achieve research objectives one, two, and three:

1. what are the characteristics of accounting information in Technical Universities in Ghana?
2. what is the effect of accounting information on management's decision-making (planning and control) in the Technical Universities in Ghana?
3. What are the challenges Technical Universities encounter in the keeping of accounting information?

Significance of the Study

This study will help policy makers and managers of Technical Universities in Ghana to take the right decision while providing necessary information about an institution's financial performance and position. Furthermore, the findings of this study are expected to impact on the decision-making ability of management since the study will provide a relevant and appropriate way of designing and communicating financial reports. In academia, the study will advance the frontier of knowledge by contributing significantly to the financial report and decision-making literature through the examination of the various effects of quality financial information. In other words, the research is expected to contribute, mainly on the empirical level, by giving further insight into the determinants of financial tools in integrating theoretical constructs within financial decision-making.

Delimitations of the Study

The study is limited to the financial officers and management of Technical Universities in the Southern Part of Ghana, which are Koforidua Technical University, Cape Coast Technical University, Accra Technical University, and Ho Technical University. Employees would give their perception on how accounting information as a tool for managerial decision-making as well as planning and control influences their performance. The study was also limited in scope to the study variables such as characteristics of accounting information, planning, and control of public technical universities, accounting information of public technical universities, and challenges of keeping proper accounting records.

Limitation of the Study

Some limitations were identified. Firstly, the respondents were reluctant in responding to the questionnaires as they did not want to come into contact with foreign materials and random people due to the Coronavirus pandemic in Ghana. This made access to data difficult, as the researcher had to consistently plead with some of the respondents in order to get the filled instruments back; this might influence the responses to the questionnaires. Also, the sampling methods employed might lead to the inclusion of respondents who might not give honest responses; nevertheless, these were expected to be on the minimum, and the researcher made sure that the final results were not significantly impacted.

Organisation of the Study

The study comprised five chapters. Chapter One covered the background to the study, statement of the problem, purpose of the study, the

study objectives, research hypotheses, significance of the study, delimitation, and limitations of the study. The second Chapter focused on the review of existing literature in relation to accounting information and planning and control. Research methods used were captured in Chapter Three. Chapter Four presented results and discussion of findings. The fifth Chapter focused on summary, key findings, conclusions, recommendations, as well as suggestions for further studies.

Chapter Summary

This chapter introduced the entire study. The chapter presented the background to the study which briefly explored the topic under study from different standpoints. The statement of the problem was also presented. The broad purpose for which the study was conducted was stated. Further, the research objectives, and research questions were stated. The researcher then proceeded to discuss the significance of the study. Additionally, delimitation of the study, limitations of the study, and organisation of the study were discussed. The succeeding chapter presents the literature review.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter focuses on the reviews of relevant literature in relation to accounting information and planning and control of Technical Universities in Ghana. The chapter is divided into four components – conceptual review which focuses on accounting, accounting information, qualitative characteristics of accounting information, and decision making; theoretical review which considers the theories underpinning the study; empirical review which focuses on empirical studies related to accounting information and its impact on planning and control; and conceptual framework. The chapter finally presents a summary.

Theoretical Review

To well situate this study in literature, two theories have been employed to underpin the study. These theories have been comprehensively tuned to accommodate the main study concepts and help explain the objectives of the relationship between the concepts. These theories employed are the Contingency theory and Rational Choice Theory. These theories were employed due to their close links to the study objectives. These theories are discussed in detail below;

Contingency theory

Contingency theory is an organizational theory that claims that accounting information should be designed in a flexible manner so as to consider the environment and organizational structure confronting an organization. According to Botchway, and Rashedi, (2020) contingency theory

must consider the circumstances under which the practices are implemented and utilization must be taken into account in order to design effective management accounting control systems. Nohria & Khurana, 2010) and Vale, Amaral, Abrantes, Leal, and Silva, (2022) looked into the various forms of contingency as relevant to management decision-making through its impact on technology, environment, budgeting system, control, and information.

The implication or relationship of contingency theory to the current study is that accounting information should be developed such that it is flexible and relevant to management decision-making relative to the planning and control of institutions or organisations and therefore it is well grounded in literature to support this study. Further managing institutions like universities makes it more imperative for managers or administrators to take certain decisions either planned or unplanned especially when it comes to accounting information and decision making hence contingency theory has been linked to the study objectives.

Rational choice theory

Rational Choice Theory traces its origins to neoclassical economic theorists, rational choice sociologists, and economic organizational theorists (Green & Shapiro, 1994; Coleman, 1990). Decision making according to rational choice theory involves a series of analytical procedures (Harrison, 1996; Doolin, 1997). The first consist of the identification of alternative choices through a search process. This is followed by an examination of various possible courses of action before a selection of an alternative that maximizes the achievement of objectives is made from various courses of action (Doolin, 1997). Rational choice theory, therefore, becomes axiomatic in

nature and attempts to provide a basis for making decisions by individuals (Coleman, 1990). The axioms of rational choice theory explicate what is deemed “rational choice” by comparing pairs of alternatives that meet the objectives of the decision-maker. The rational actor chooses the action that maximizes the outcomes of decisions given his rationally formed expectations (Botchway, & Rashedi, 2020).

Decision-making in any organizations or institution is very vital and therefore involves proper thinking, especially in the area of accounting information. Managers or policymakers are expected to make rational choices among alternatives available to them and it is at this stage that rational choice theory comes in hence its relations to the purpose and objectives of the current study.

Conceptual Review

This section of the chapter reviews the main concepts of the study. Specifically, accounting, accounting information, qualitative characteristics of accounting information, and managerial decision-making were discussed in detail.

Accounting

Accounting is defined by Paul, Veronica, and Lawrence, (2021) as a measurement and communication system that provides users with economic and social information about an identifiable entity. This information enables users to make informed judgments and decisions that ultimately lead to the optimal allocation of resources and the achievement of the organization's goals. Accounting, as defined by Sudyn, (2019), is the process of identifying, measuring, and communicating economic information to users in such a way

as to enable users to make informed judgments and decisions based on the information. The goal is to assist those who use this information in making decisions that are better informed about their options.

Accounting information

Accounting information is the type of information that is generated by an organization to be used as a basis or tool for decision making. This type of information is known as "financial information." It is of the utmost importance for the success of every business organization that information be made available at the appropriate time, and failure to leverage accounting information can frequently prove counterproductive toward the accomplishment of goals in organizations (Rikhardsson, & Yigitbasioglu, 2018). Accounting information is qualitative and quantitative details presented in a format that is readable and understandable, with the goal of assisting a variety of stakeholders. This can also be related to the record that is produced from the transactions that take place at the organization's finance and account section to be used as a tool or resource upon which decisions are made by the organization in order to move it closer to achieving its goals and objectives (Checon, 2018). This information covered a wide range of topics, including financial information, information about non-financial topics, information about managerial topics, and so on. (Adebayo, Idowu, Yusuf, & Bolarinwa, 2016).

Accounting Information for Management Decision-Making

Information and related systems are closely linked to the decision-making process of a company. It is important to know what information managers need in decision-making and how managers develop systems that

allow them to obtain relevant information. Increasing complexity in companies or organizations causes managers increasingly depend on various internal and external sources of information (Dimovski, Penger, & Škerlavaj, 2007). Hence, company information systems, especially accounting information systems, are gaining importance. However, we should not neglect the information systems dealing with the collection and management of information coming from a company's environment.

Accounting systems form the main part of an information system in a company because it provides only worthwhile information. This enables external users to learn about the success of a company's business, while the internal information provides a good information basis for management decision-making. The better the knowledge of users of accounting information about their design, their weaknesses and constraints, and the appropriateness of decision-making, the better their efficiency in managerial decision-making (Hočevar, Zaman, & Petrovič, 2008).

The objective of accounting information is to provide insight into a financial position of a company so that it is useful to users of information in their decision-making. For this reason, the information must be comprehensible, essential, reliable, and comparable. It must be prepared in such a way that its users will be able to read all the information they need when making decisions. It should also enable them to make information-based decisions in the future (Odar et al., 2011).

Users of Accounting Information

In reality, the world is far more complex and demanding than for the organization or institutions to only provide information to the stakeholders in the form of a report but it is more challenging for the managers to produce performance that must reflect in the quality of information that is relevant, reliable and valid to all the stakeholders in making useful economic decisions. The managers adopt a simple agency model of the statutory audit in discharging their fiduciary duties. That means they represent the interest of the shareholders in running the affairs of the business by providing quality information to the users of financial statements.

The management needs accounting information for control over assets. There is reason for those in charge of the operation of the business to always put in place a strong internal control system in place. The alignment of the system with the overall objectives of the organization will boost the efficiency of its overall management style. This also will encourage effective monitoring of cost incurred to revenue generated in the accounting period which is the basis for the preparation and presentation of the annual report (Akin, 2017). Managers may want auditors to understand their organizations and add value by providing business advice and helping them to access finance at a reduced cost.

The governments need the information for the formulation of fiscal policy. The government can adjust its spending levels and tax rates to monitor and influence a nation's economy based on the report provided by companies. The quality of the report determines the tax liability imposed by the government. This is an indication that accounting information must be

reliable, accurate, and valid at all times. The tax authority who are agents of the government need accounting information to determine the amount of tax payable by the company. The shareholders need accounting information to enable them to make appropriate investment decisions such as buying and selling of shares. Also, the information will enable the existing shareholders to know the worth of their investment and possibly measure or determine the return on their investments.

Qualitative Characteristics of Accounting Information

The accounting information has certain qualitative characteristics that draw attention to the information sources that are helpful for users in terms of making decisions. These qualitative characteristics are important for general purpose financial statements, which are used by external users, as well as for management or costing techniques, which are used for managerial decision-making (Beattie, McInnes, & Fearnley, 2015).

Relevance

Accounting information is said to be relevant if it is capable of affecting the decisions made by its intended users. In doing so, accounting information will make a difference in decisions on the basis of its predictive value, confirmatory value or both. Accounting information is particularly relevant to managers if it has predictive value that predicts future costs and revenues among courses of actions. Historical information may not necessarily be relevant in making future decisions. The expected future cash flows from alternatives will be used in selecting a suitable alternative (Alawaqleh, 2021).

Reliability

The quality of information that allows users to rely on it with confidence is known as reliability. This indicates that it is verifiable, faithfully

represented, and free of errors and bias. The term "representational faithfulness" refers to the agreement or correspondence between a measure or description and the phenomenon it is supposed to represent (Aladwan, M., & Shatnawi, 2019). That is, the numbers and descriptions are accurate representations of what actually occurred. Verifiability refers to the ability to ensure that information represents what it purports to represent or that the chosen method of measurement was used without error or bias by reaching a consensus among measurers (Al-Dmour, Abbod, & Al-Balqa, 2018). Neutrality means that the relevance and reliability of the information should be the primary concern when developing or implementing standards, and that the information cannot be chosen to favor one group of decision-makers over another (Maines, & Wahlen, 2016).

Comparability

Accounting information about an enterprise is extremely useful if it can be compared to accounting information about other enterprises. Comparability results when different enterprises apply the same accounting treatment to similar events. Compliance with international accounting standards helps to enhance comparability (Xing & Yan2019).

Consistency

Consistency means conformity from period to period with unchanging policies and procedures. Conformity can be achieved by applying the same accounting treatment to similar events from period to period. It does not mean that an enterprise can't switch from one accounting method to another if the new method is justified and is preferable. The enterprise should disclose the reasons and the effect of such change (Umar, Shahzad Ferrer & Jareño 2018).

Accuracy

Accuracy of accounting information ensures its preciseness to aid decision making. Accurate information bearing both qualitative and quantitative features provide management with precise measurement of events in monetary terms (Herath & Albarqi, 2017).

Timeliness

For accounting information to be considered timely, it must be provided to decision-makers within a reasonable amount of time before they make their decisions. The provision of accounting information in a timely manner assists in the adoption of appropriate techniques, which is necessary in order for an organization to achieve its goals (Al Natour 2021).



Figure 1: Qualitative characteristics of accounting information

Source: Dabash, (2016)

Managerial Decision Making

Typically, when defining managerial decision making, the emphasis is placed on the decision-making process or the decision itself. It is useful to

examine the meaning of the term decision. A decision can be defined as a judgment regarding what an entity should do under specific conditions after considering alternative courses of action (Ofstad, Lamvik, Støa, & Emberland, 2015). Inferentially, decisions are made with the consideration of certain processes prompted by deliberations on possible alternative courses of action. In Herbert Simon's view, decisions are made through three primary phases: "finding occasions for making a decision; identifying possible courses of action; and selecting among possible courses of action" (Simon, & Lea, 2016 p. 1). According to a second definition, a decision is an intellectual process of distinguishing between alternatives. In this instance, the decision permits the decision-maker to select a preferred objective, associated tasks, and reasonable goal-oriented statements. A decision can also be viewed as a comparison of available options and an analysis of potential outcomes (Priem, Harrison, & Muir, 2012).

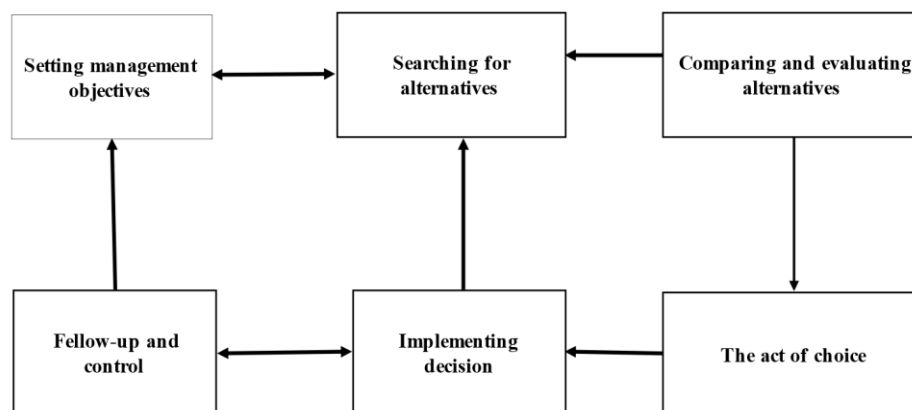


Figure 2: Managerial decision making

Source: Harrison (1995)

According to Harrison (1996), the components of the managerial decision-making process are the decision-making functions. These functions are explained briefly as follows;

1. Setting managerial objectives. Managerial decisions begin with setting objectives that enable the performance of associated tasks to achieve the objectives that gave rise to them.
2. Searching for alternatives. Searching for alternatives includes gathering relevant internal and external sources of information to design a set of alternatives that will ensure the successful achievement of objectives.
3. Comparing and evaluating alternatives. This function of the decision-making process compares alternatives to establish possible relationships and preferences that lead to successful outcomes.
4. The act of choice. This is when the decision maker chooses from among a set of alternative courses of actions.
5. Implementing decisions. Implementation decisions comprise activities that the chosen course of action into reality.
6. Follow-up and control. This managerial decision function ensures that the implemented decision has outcomes consistent with the objectives that gave rise to it.

The managerial decision-making process involves variables that aid the selection of the best possible course of action. One of these variables that play a crucial role in the decision-making process is accounting information. Accounting information as a useful decision-making asset is discussed above.

Empirical Review

Characteristics of accounting information

A number of studies looked at accounting information and decision making. For instance, Obaidat, (2017) argued that reliability in accounting information means that it is verifiable, faithfully represented, and is reasonably free of errors and bias. Palazuelos et al., (2017) provide a compelling argument for the link between reliable accounting data and rational decision making. Using a sample of 471 bank loan officers in Spain, and structural equation modelling, the authors conclude that perceived accounting information quality has a positive impact on trust.

Odar, Kravic, and Jerman, (2015) conducted a survey on some selected Slovenian companies and found that financial statements are useful if they are characterized by several attributes, including integration and timeliness. Some researchers have studied the relationship between the comparability of accounting information and decision making (Osborne, 2016; Xing & Yang, 2018). Xing & Yang (2018), for example, used beta as a measure of risk among companies listed in the Compustat and CRSP databases from 1962 to 2012. They employed regression analysis to measure the impact of comparable accounting information on systematic risk. They found that accounting information quality is a sufficient and necessary condition for reducing exposure to systematic risks.

According to Teru, Idoku, and Ndeyati, (2017) a quality accounting information system has a significant impact on the quality of accounting information. However, if the AIS is not constructed properly, it will not be able to produce quality information in accordance with user expectations. He

added that by implementing a quality information system, users will be able to obtain quality information at the right time in order to make the right decisions. In accordance with the purpose and function of the accounting information system (Ali, Bakar, & Omar, 2016), an accounting information system ensures the quality of the information used for controlling, planning, and activity analysis of the organization (2011). According to Teru, et al (2017), information is only useful when it possesses the quality characteristics required by users for making valuable decisions and achieving organizational objectives.

Xu (2019) developed a framework for linking the relationships between data quality in accounting information systems and stakeholder groups, such as information managers, information users, internal auditors and information producers. The study found that quality of accounting information can be estimated by four dimensions: accuracy, timeliness, completeness and consistency. Ballou et al., (1993) identified consistency as a dimension that takes place when the representation of the data values is the same in all cases. Similarly, Budairi (2017) revealed that there is a positive relationship between quality of accounting information, and the level of decisions quality in his empirical study on of selected companies in Iraq.

Ionu and Petec (2015) studied the significance of accounting information in decision making. The researchers identified four principal qualitative characteristics: Reliability, compatibility of information, comprehensibility, and relevance. The researchers also suggested that accounting information has a crucial role in substantiating the economic decisions, offering the possibility of an accurate representation of economic

phenomena and processes. There is a consistent operation and making of decision by the users and they make use of information provided by financial statements. This indicates that accounting information has a positive relationship with decision making. Gwangwava, Faitira and Tendere (2016) studied organization bookkeeping information: A sample of 135 firms was picked using ZTA database. There was a positive relationship between database information and the performance of SMEs.

In summary, deduction from the empirical review showed mixed findings in the literature regarding the characteristics of accounting information. These differences in the findings might be due to differences in the methodology adopted, study period, geographical location, institution settings, the concepts used, the implications of the findings or the population as well as the sample size representation. From the review, it could be seen that there were a number of gaps in literature concerning the characteristics of accounting information. Firstly, the majority of the prior studies were conducted outside the current study locale, Ghana. Secondly, most of the prior studies used only a few participants/respondents ie small sample size construction. Thirdly, the prior studies were carried out in the private sector and therefore the implication of their findings could not be applied to that of the public sector which has slightly different dynamics. These might have influenced the outcomes of the prior studies. thus, findings obtained from these studies could not be applied to the current study. This, therefore, creates a gap in literature that requires a study of this nature to fill the gap. Thus, the current study used of comparably sufficient sample size, employing the

explanatory research design, etc with the aim of sealing the loopholes created by previous studies.

Effect of accounting information on management's decision-making

Gacheru (2017) investigated accounting information system and management decision making in manufacturing company in Nigerian. Data were collected through questionnaire while Chi-square (X^2) statistics was used for data analysed. The results showed that there was a strong relationship between the use of organizations accounting information system and managerial efficiency. It results further revealed that AIS could be used to control fraud and mismanagement. It was concluded that the use of accounting information system enhanced decision making in manufacturing industries.

Alawaqleh, (2021) studied the relationship that exists in accounting information that end up affecting the decisions made in the Sri Lankan manufacturing sector and found out that accounting information has statistically significant relationship with both marketing and industrial related strategic decision making of companies in Sri Lanka's manufacturing sector.

Inalegwu, (2018) investigated the relationship between accounting information and decision making in the Sri Lankan manufacturing Sector. Primary data for the study were collected through questionnaire and survey. Data were analysed using Pearson's correlation. The result of findings indicated that accounting information has a statistically significant strong positive correlation with marketing, strategic decision making and manufacturing related strategic decision making of companies operating in Sri Lanka's manufacturing sector.

Socea, (2012) investigated the impact of accounting information system in decision making in Ethiopia. Primary data were collected from respondents with open and close ended questionnaires and interview. The result of the findings showed that accounting information system has significant effect on decision making process in development association. He further recommended that to solve financial reporting problems, organisations must invest in continues short term training and as well as on information technology tools to advance their efficiency, effectiveness and their overall performance.

Shuhidan, Mastuki & Wan (2015) detected a significant impact of Accounting Information System (AIS) on the organizational performance; they also discovered a strong relationship between AIS success and organizational performance. Whereas Onaolapo and Odetayo (2012) found out that Accounting Information System (AIS) enhance organizational effectiveness especially in global technology advancement, agrees with Floştoiu, (2019), who detected the role and place of accounting information in the decision making stating that accounting information occupies a very important place in the architecture of the economic information system, having the highest degree of certainty and the possibility of an accurate representation of economic phenomena both at micro and macroeconomic levels.

Gacheru, (2017) examined the role of accounting information in strategic decision making in manufacturing industries in Bangladesh. Five strategic decision areas such as basic strategic decision, manufacturing decision, human resource decision, long term investment decision and

marketing decision were considered for the study. They employed statistical package for the social science (SPSS) for data analysis. The results of the finding proved that there is significant relationship between accounting information and strategic decisions and strategic decisions in all the selected areas. It was also revealed from the analysis of the opinion of the respondents that 44.44% of the respondents always use accounting information in making strategic decision in manufacturing industries in Bangladesh.

Alnajjar (2017) who investigated the impact of accounting information systems on the management performance and organizational performance. The result showed that the accounting information systems significantly impact the management performance and organizational performance. Through applying accounting information systems, the obtain information will be more useful, for decision making in order to achieving the company's goals and objectives, which increase the company performance.

According to the findings of Shuhidan, Mastuki, and Wan (2015), there is a significant impact of Accounting Information System (AIS) on the performance of the organization, and there is also a strong relationship between the success of AIS and the performance of the organization. Accounting information occupies a very important place in the architecture of the economic information system, having the highest degree of certainty and the possibility of an accuracy, as discovered by Floștoiu, (2019) who agrees with the findings of Onaolapo and Odetayo (2012), who discovered that Accounting Information System (AIS) increases organizational effectiveness, particularly in the context of global technological advancement.

In conclusion, it can be observed from the review of prior studies that the results indicated mixed findings in the literature regarding accounting information on management's decision-making. These inconsistencies in the findings might be due to differences in the methodology adopted, study period, geographical location, institution settings, the concepts used, the implications of the findings or the population as well as the sample size representation. From the review, it could be seen that there were a number of gaps in literature concerning the effect of accounting information on management's decision-making. Firstly, the majority of the prior studies were conducted outside the current study locale, Ghana. Secondly, most of the prior studies used only a few participants/respondents ie small sample size construction.

Thirdly, the prior studies were carried out in the private sector and therefore the implication of their findings could not be applied to that of the public sector which has slightly different dynamics. These might have influenced the outcomes of the prior studies. thus, findings obtained from these studies could not be applied to the current study. This, therefore, creates a gap in literature that requires a study of this nature to fill the gap. Thus, the current study used of comparably sufficient sample size, employing the explanatory research design, etc with the aim of sealing the loopholes created by previous studies.

The challenges in keeping accounting information

Watty, McKay, and Ngo (2016) found faculty resistance a major challenge in implementing technology into accounting curricula. Faculty

support for changes may be especially problematic if senior faculty are near retirement and unwilling to learn new types of technology or software. However, it is not simply an issue of resistance of current faculty to learn, but also of hiring new accounting faculty who have the expertise to teach technology skills (Hastings, Reckers, & Solomon, 2003). Change often incurs challenges, but which challenges are most impactful in the integration of technology and data analytics into the accounting curriculum is unclear. The resources accounting departments need to implement changes are also uncertain. To explore these issues in more detail, we propose research question four: What are the challenges faced and what resources are needed.

Abdul-Rahamon and Adejare (2014) examined the impact of bookkeeping practices on SMEs performance in Nigeria. The study used both qualitative methods and quantitative methods and found that bookkeeping practices is positively associated with SMEs financial performance. Mutu (2015) examined the effect of bookkeeping practices of SMEs in Chuka Town, Kenya on firm growth. The study showed that majority of SMEs were not keeping proper books of accounts and that bookkeeping practices is associated with business growth. Sibanda and Manda (2016) examined the symptoms of accounting practices that contribute to the failure of SMEs in South Africa. The studies based on a sample of 40 SMEs revealed that majority of SMEs do not keep proper books of accounts and that negatively affect their growth and performance. Proper bookkeeping practices also helps business to track their expenditure, evaluate the consequence of certain decisions taking and take corrective actions. Chelimo and Sophia (2014) examined the effect of bookkeeping practices on the growth of SMEs in Kabarnet Town, Baringo

County, Kenya. The study based on a sample of 72 respondents revealed that bookkeeping practices is positively associated with the growth of SMEs.

In summary, deduction from the empirical review showed mixed findings in the literature regarding the challenges in keeping accounting information. These differences in the findings might be due to differences in the methodology adopted, study period, geographical location, institution settings, the concepts used, the implications of the findings or the population as well as the sample size representation. From the review, it could be seen that there were a number of gaps in literature concerning the challenges in keeping accounting information. Firstly, the majority of the prior studies were conducted outside the current study locale, Ghana. Secondly, most of the prior studies used only a few participants/respondents ie small sample size construction.

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Conceptual Framework

A conceptual framework is defined as the conceptualization of the relationship between variables in the study and showing the graphical or

diagrammatical relationship between the variable by the researcher (Mwathi, & Karanja, 2017). It enables the quantitative analysis, operation, collection of data, and measurement of the various variables identified by the researcher (Antwi, & Hamza, 2015). According to Blumberg, Cooper, and Schindler, (2014) a conceptual framework affords the researcher the opportunity to also bring up the various variables in the study.

However, drawing from the theories and empirical studies reviewed, the researcher constructed the conceptual framework in Figure 3. The conceptual framework for the current study used one independent variable – accounting information, and a dependent variable, planning, and control, respectively. This framework guided the rest of the work.

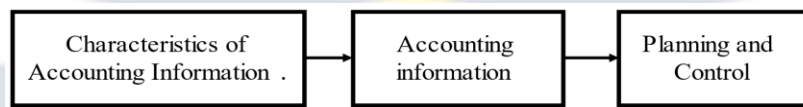


Figure 3: Conceptual Framework of the Study.

Source: Author's construct (2022)

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter presents information on the following: research philosophy, research approach, research design, study area, the population of the study, sample size and sampling procedure, data collection instruments, data collection procedure, data processing and analysis, ethical issues, and chapter summary. The research design focused on the research paradigm employed, research approach, and methods. The study area focused on the research setting.

Research Philosophy

There are numerous research philosophies or paradigms available to the researcher such as the positivist paradigm, the interpretive paradigm, the pragmatism paradigm, and the advocacy/participatory paradigm. The study employs the positivist research philosophy. Positivism implies that the researcher maintains independence and disregards all human interests in order to ensure objectivity (Wilson, 2017). This viewpoint is employed because the study seeks to study the relationship between variables, characteristics of accounting information, the impact of accounting information on decision making and challenges of keeping accounting information, using quantitative data which is consistent with the positivist research paradigm (Creswell, Plano-Clark, Guttman, & Hanson, 2003). Also, the researcher seeks to ensure the objectivity of findings or to maintain minimum researcher-interaction with the researched.

Also, the researcher is aware that debates still continue on how social science researches should be conducted (Easterby-Smith, Thorpe, & Jackson, 2012). These debates mostly revolve around two divergent philosophical views –positivism and constructivism (Easterby-Smith et al.). However, the choice of how a researcher perceives the world lies with the end to which the research is being conducted (Creswell et al., 2003; Easterby-Smith et al. 2012). Since the current study focuses on assessing relationship between concepts, it is prudent for the researcher to make sure biases are minimised for the production of reliable results; hence, the employment of this research paradigm.

Research Approach

Again, the study utilised a quantitative research approach as it sought to assess the relationship between study variables. Quantitative approach puts emphasis on measurement, and data are analysed in a numerical form to provide brief description, and also enables analysis of causal relationships between variables (Goundar, 2012). The quantitative approach was employed for the reason that the data collected from the respondents using questionnaires could be analyzed easily by utilizing standard statistical tools like means, standard deviation, percentages and frequencies, and inferential statistics among others (Creswell, et al 2003). Also, quantitative approach has techniques, measures and designs that come up with numerical and quantifiable data (Simon, Lee, Cottrell, & Verleysen, 2007). Further, this approach depends on the principles of verifiability of proof, substantiation and confirmation utilising the correct measurement of variables being studied.

Research Design

The choice of research design chosen by a researcher should be informed by the nature of the research to be conducted by the researcher. Research designs such as quantitative research design, experimental design, correlational design, qualitative research design, descriptive design, explanatory design, and diagnostic design are all available to the researcher and are selected based on the nature and the direction of the study. The study used the explanatory research design. Explanatory research design is a design, in which a researcher measures two variables – a dependent and an independent – understands and assesses the statistical relationships between them with no influence from any extraneous variable, and with intention of assessing cause-effect relationships between the variables (Goundar, 2012). This design was appropriate for the current study because the researcher sought to assess a linear relationship between two sets of variables – accounting information and planning and control of technical universities in Ghana, with intention of analysing the causal relationship between these sets of variables (Saunders, Lewis, & Thornhill, 2019).

Study Institutions

Technical Universities ACT, 2016 An Act to provide for the establishment of Technical Universities; to provide for the conversion of polytechnics to Technical Universities and to provide for related matters. The aims of a Technical University are to provide higher education in engineering, science and technology-based disciplines, technical and vocational education and training, applied arts and related disciplines as the Council of the Technical University may, in consultation with the National Council for

Tertiary Education determine in accordance with the following principles: (a) higher education shall be made equally accessible to all persons suitably qualified and capable of benefiting from education and training offered at a Technical University; (b) programmes of study shall take into consideration the multiplicity of scientific theories and methodologies; (c) use competency-based and practice-oriented approach in teaching, organisation and delivery of courses; (d) develop strong linkages and collaboration with relevant industries, businesses, professional bodies and technical experts in the design and delivery of programmes; (e) offer programmes and courses within the mandate of a Technical University; and (f) provide opportunities for technical and professional skills development, applied research and publication of research findings. (2) A Technical University, for the purpose of achieving its aims, shall have schools, faculties, institutes, departments, and centers approved and accredited by institutions responsible for tertiary education and accreditation. However, the current study selected four (4) Technical Universities in Ghana (Koforidua Technical University, Cape Coast Technical University, Accra Technical University and Ho Technical University).

Population

The target population for the study was 260 management and accounts officers of the selected technical universities in Ghana. Target population refers to individuals within the general population who the researcher targets to draw a sample from for a study (Navarro & Maldonado, 2007). Also, research population, according to Frankel and Wallen (2006), refers to the general group from a researcher wishes to draw sample for a study. The population for this study was drawn from four technical universities in Ghana

such as Koforidua Technical University, Cape Coast Technical University, Accra Technical University, and Ho Technical University. The population distribution is shown in Table 1.

Table 1: Population of the Study

Institutions	Number of respondents.
Accra Technical University	72
Cape Coast Technical University	65
Koforidua Technical University	59
Ho Technical University	64
Total	260

Source: Institution Administration (2022)

Sampling Procedure

The study adopted the sample size formula for finite population proposed by Krejcie and Morgan (1970). With a population proportion of 50% and a confidence level of 95%, a sample size of 155 was appropriate for a finite or known accessible population of 260. Krejcie and Morgan argue that there is no need using sample size determination formula for 'known' population since the table has all the provisions one requires to arrive at the required sample size. All the four technical universities have similar characteristics; thereby, making unbiased selection easy.

With respect to sampling method, the proportionate random sampling techniques were employed to select the 155 participants from the accessible population. The respondents in each of the four Schools were subsequently selected by simple random sampling techniques after applying the proportion methods. The sampling method was chosen due to the homogenous characteristics relative to accounting information available for decision-

making within each institution (Schools). Also, the random sampling method allowed for respondents to have equal and independent chances of being selected from each of the four schools, making it more scientific, accurate, and representative. The sample size distribution is shown in Table 2.

Table 2: Sample Distribution

Institutions	Number of respondents	Proportion	Sample size
Accra Technical University	72	$(72/260) * 155$	43
Cape Coast Technical University.	65	$(65/260) * 155$	39
Koforidua Technical University	59	$(59/260) * 155$	35
Ho Technical University	64	$(64/260) * 155$	38
Total			155

Source: Institution Administration (2022)

Data Collection Instrument

The main tool used for primary data collection for this study was the structure questionnaire containing closed-ended questions. Questionnaires are usually used when it comes to collection of primary data for descriptive or explanatory research (Saunders et al., 2019). The questionnaire was employed because of its ability to collect original information from a large group of participants and also cost-saving use. The questionnaire was divided into four (4) sections – section A to section E. The sections were organised, respectively, under “Socio-Demographic Information”, “characteristic of accounting information” “accounting information”, planning and control and “challenges of keeping accounting information”.

Section A of the questionnaire was to obtain respondents' socio-demographic information. Section B was to obtain responses from the participants on characteristics of accounting information at public technical universities. Section C was to ascertain data from the respondents on accounting information, Section D obtained information on the planning and control of public technical universities, and finally, section E obtain information on challenges of keeping accounting information". Section B contained seven (7) characteristics of accounting information items measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Section C contains nine (9) items on planning and control of public technical universities, section D contains nine (9) items on accounting information of public technical universities and finally, Section E contains contained seven (5) items all are measured on the challenges of keeping accounting information on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

Pilot Test

A pre-test/pilot testing exercise was carried out to help assess the clarity of questions, likely responses and challenges likely to be faced during the actual data collection exercise. It also assessed both face and content validity of the instruments. A reliability test was carried out. After the questions were reviewed, the actual data collection exercise was followed.

Reliability of the Instrument

The instruments, after they were completed by the respondents, were collected and analysed. The Cronbach Alpha technique was used to measure the internal consistency and reliability of the items in the instrument. The

Cronbach alpha-coefficient ranges from 0 to 1. A scale is termed reliable and internally consistent if its Cronbach alpha-coefficient score is not less than 0.70 (Kwapong, 2017). Considering the fact that the scales were adapted from prior researchers' reliability coefficients might already have been computed.

However, the researcher, again, computed reliability coefficients for the scales, and the results presented in Table 3. Table 3 presents the consistency and reliability test results for each variable.

Table 3: Reliability of the Instrument

Variables	Number of items (n)	Cronbach's α
Characteristics of accounting information.	7	0.832
Planning and controlling.	9	0.790
Accounting Information of public technical universities.	9	0.841
Challenges of Keeping proper Accounting Records.	5	0.860
Source: Field survey (2022)	N = 155	

From Table 3, the calculation of coefficient of Cronbach's Alpha was carried out to test the instruments' reliability, the methodology opted to determine and statistically calculate Cronbach's Alpha. It provides the proportion of variance estimation in the test scores that can be attributed to true score variance. Cronbach's Alpha of Characteristics of accounting information is 0.832 for 7 items which indicate that the 83% items, Cronbach's Alpha of Planning and controlling is 0.790 for 9 items which indicates that the 79% items, Cronbach's Alpha of Accounting Information of public technical universities is 0.841 for 9 items which indicate that the 84%

items and finally Cronbach's Alpha of Challenges of Keeping proper Accounting Records. is 0.860 for 5 items which indicates that the 86% items all of which shows relatively high internal consistency. According to Ånfors, Kammerlind, and Nilsson, (2021), 0.60 is lowest and considered as unreliable, .70 is considered relatively reliable and .80 and .90 is highly acceptable. (Note that a reliability coefficient of .70 or higher is considered "acceptable" in most social science research situations.)

Data Collection Procedure

Before data were collected, consent and permission from the relevant respondents (students) were sought. An introductory letter introducing the researcher to the Institutional Review Board (IRB) was obtained from the Department of accounting of the University of Cape Coast, and ethical clearance was obtained from the IRB. The IRB reviewed the methods for the study to make sure the study met all the needed ethical guidelines before issuing clearance to collect data. The ethical clearance in addition to the introductory letter was used to seek permission from the needed stakeholders with respect to the various institutions. Data were obtained from a primary source. The researcher believes that if a problem is thoroughly identified, the more adequately it is planned and executed successfully. Primary data was obtained from participants at various technical universities. The main advantage of procuring primary data is that the exact information wanted is ascertained. Terms were also carefully defined for respondents who assisted in the exercise administration so that as humanly possible it can be, misunderstanding could be avoided (Osuala, 2005).

Data Processing and Analysis

Once the primary data had been collected, data cleansing exercise was carried out to weed out outliers and non-responses with the purposes of enhancing the reliability of the primary data collected. With these completed, coding and data entry were carried out with the usage of the Statistical Package for Social Sciences version 25.0 (With SPSS process macro as attached package). The usage of these applications is long-recognized as appropriate given the statistical techniques embedded in them (Roni & Djajadikerta, 2021; Zou, Lloyd & Baumbusch, 2020). Data processing and analysis were done because it fulfils the primary objective of quantitative research which is to draw conclusion based on empirical observation and mathematical expression of the phenomenon (Johnson & Christensen, 2019).

Ethical Consideration

According to Munarez Galvez, and Arista Miranda, (2017) the rights of respondents must be observed in the event of any research process. To guarantee confidentiality and anonymity of respondents, certain sensitive questions were excluded from the socio-demographic information section of the data collection instruments like the respondent's religious background, home address and telephone numbers. Similarly, respondents were assured that information obtained would be used solely for academic purposes. Hence, all information obtained was strictly held confidential and not shared with any other person or authority. In the conduct of this study, the following ethical considerations were observed:

First, respondents were told about the aim of the research, and informed consents were sought from both the students and the authorities of

the university of Cape Coast. Second, voluntary participation of respondents was ensured. Moreno, Schmidt, and Joffe, (2017) stated that “all research participation must be voluntary”, hence, no respondent was induced or coerced to take part in the study. Third, the rights of the participants to retreat from the research process were observed. That is, respondents who are no longer interested in providing information to the researcher were free to opt out without any form of pressure from the researcher. Fourth, privacy of respondents was strictly observed by ensuring that it was not indicated anywhere in the instruments used that respondent should indicate their names. This was to avoid revealing respondents’ identities.

Chapter Summary

This chapter presented the research philosophy, approach, design, population of the study, sample size and sampling procedure, data collection instrument, data processing and analysis, and ethical considerations. The study used the quantitative research approach as well as the explanatory study design. The study institutions were four technical Universities in Ghana. The questionnaire was used for data collection. Both descriptive statistics and inferential statistics were employed for data analysis, and SPSS 22 was used for data processing.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The main focus of the study was to assess the impact of accounting information on planning and control in Technical Universities in Ghana. The study results and interpretation of the outcomes have been presented in this chapter. The chapter presents analysis of the demographic information of the participants involved in the study. Before the presentation and interpretation of main results of the study, the researcher presents the descriptive statistics of the data collected, according to the study variables. The researcher then presents the main analyses which focus on the study objectives. Finally, the chapter summary is presented.

Socio-Demographic Information of Participants

This section covered the study participants' gender, age, educational background, and length of service. Though not central to the core focus of this study, the demographic information helps to contextualise the findings of the study and, also contributes to formulation of appropriate recommendations.

Table 4 displays the results on the demographic information of the study participants.

Table 4: Demographic Information of Participants

Variables		Frequency (%)
Gender	Male	84 (54.2)
	Female	71 (45.8)
Age group	21-30 years	38 (24.5)
	31-40 years	48 (31)
	41-50 years	62 (40)
	Above 50 years	7(4.5)
Educational background	HND	11 (7.1)
	Bachelors'	64 (41.3)
	Master's	66 (42.6)
	PhD	14 (9.0)
Length of service	Less than 2 years	12 (7.7)
	2-4 years	38 (24.5)
	5-7 years	72(46.5)
	More than 7 years	33 (21.3)

Source: Field survey (2022)

N=155

Table 4 shows the socio-demographic information of the management and accounts staff of technical universities involved in the study. From the Table, 84(54.2%) of the participants were males whilst 71(45.8%) were females. This implies that both male and female sex were fairly represented; though males were slightly more than their female counterparts, this difference was not huge enough to have any influence on the outcomes of this study. In terms of the age range of the respondents, the majority of the respondents were between the ages of 41 and 50 years old, making up 62 (40 percent) of the total respondents. This was followed by respondents who were between the ages of 31 and 40 years old, making up 48 (31 percent), 21 to 30 years old, making up 38 (24.5 percent), and finally, respondents who were above 50 years old, making up 7 (4.5 percent) respectively.

In terms of the employees' educational backgrounds, an HND was considered the bare minimum qualification required for employment. According to the table, 11 of the respondents, representing 4.5 percent of the total 155 respondents, held a higher national diploma (HND); 64 of the respondents, representing 41.3 percent, held bachelor's degrees; 66(42.6 percent) held master's degrees; and the remaining 14 of the respondents, representing 9.0 percent, held PhD degrees. The table also reveals that the majority of respondents (72), which accounts for 46.5 percent of the total, have worked for their respective universities for between 5 and 7 years. This is followed by those in 2-4 years, totaling 38 with a percentage of 24.5 percent; 33 of the respondents representing 21.3 percent have worked for more than 7 years, while only 12 respondents have worked with their respective universities for less than 2 years representing 7.7 percent. However, having 5 years of work experience will be sufficient to have sufficient information about accounting information, and the results obtained from respondents will not be spurious.

Characteristics of Accounting Information in Technical Universities in Ghana.

The first objective sought to determine the characteristics of accounting information in Technical Universities in Ghana. To achieve this particular objective, the researcher conducted a descriptive analysis and the result were put in a form of mean and standard deviation to enable comparison and conclusion drawn.

From Table 5, the results are on means and standard deviation presenting the level of agreement of the respondents on the Characteristics of

Accounting Information in the Technical universities in Ghana. According to the results, “The institution currently has accounting information system” with a mean of 1.574 and standard deviation of .746. “Reliance of the institution on accounting information increases effectiveness”.

Table 5: Characteristics of Accounting Information

	Mean	SD
The institution currently has accounting information system	1.574	.746
Reliance of the institution on accounting information increases effectiveness.	1.529	.732
The institution depends on accounting information that are relevant	1.561	.712
Accounting information provides the institution with information that are accurate.	1.606	.848
The institution depends on accounting information that is cost-effective.	1.729	.913
Accounting information provides information that are clear in nature to the institution.	1.600	.864
Accounting information improves on the timeliness of information in the institution.	1.658	.921
Source: Field Survey (2022)	N = 155	

This is indicated by the total level of agreement of the respondents with a mean of 1.529 and a standard deviation of .732 indicating that the respondents agreed to this fact.

The respondents are also in total agreement to the statement that “The institution depends on accounting information that are relevant” with (mean = 1.561; SD = .712); “Accounting information provides the institution with information that are accurate” also had a (mean = 1.606; SD = .848), this indicates a total agreement to the statement by the respondents as a characteristic of accounting information. “ The institution depends on accounting information that should be cost effective.” the respondent completely agrees to this fact with a (mean = 1.729; SD =.913), “ Accounting

information provides information that are clear in nature to the institution” respondents again totally agree to the statement with a (mean = 1.600; SD =.864), “ Accounting information improves on the timeliness of information in the institution” the results to this statement showed a (mean = 1.658; SD =.921), also indicating a high level of respondents’ agreement to the fact. In summary, the respondents completely agreed with the presence of the above statements relative to the characteristic of accounting information in their respective institutions. This clearly implies that the technical universities in Ghana have attached seriousness to accounting information because of its positive impact on the institution.

However, the findings of the current studies confirm the findings by Ionu and Petec (2015) which studied the significance of accounting information in decision making. The researchers identified four principal qualitative characteristics: Reliability, compatibility of information, comprehensibility, and relevance. The researchers also suggested that accounting information has a crucial role in substantiating the economic decisions, offering the possibility of an accurate representation of economic phenomena and processes. There is a consistent operation and making of decision by the users and they make use of information provided by financial statements. This indicates that accounting information has a positive relationship with decision making. Gwangwava, Faitira and Tendere (2016) studied organization bookkeeping information: A sample of 135 firms was picked using ZTA database. There was a positive relationship between database information and the performance of SMEs.

Again, the finding is also consistent with Xu (2019), developed a framework for linking the relationships between data quality in accounting information and stakeholder groups, such as information managers, information users, internal auditors and information producers. The study found that quality of accounting information can be estimated by four dimensions: accuracy, timeliness, completeness and consistency. Ballou et al., (1993) identified consistency as a dimension that takes place when the representation of the data values is the same in all cases. Similarly, Budairi (2017) revealed that there is a positive relationship between quality of accounting information, and the level of decisions quality in his empirical study on of selected companies in Iraq.

The Effect of Accounting Information on Management's Decision-Making (planning and control) in the Technical Universities in Ghana

The second research objective sought to assess the impact of accounting information on Management's decision-making (planning and control) in the Technical Universities in Ghana. To achieve this objective, the researcher conducted the linear regression analysis. The results, as shown in Table 9, presented the regression coefficient, standard error, the F-statistic, t-statistics, significance level of the coefficient, the model summary (R, R-square, adjusted R-square), and the collinearity statistics which produced the variance inflation factor (VIF) and tolerance.

From Table 10, the results showed R value of 0.516 indicating a positive relationship between accounting information and decision making ie planning and control at the technical universities in Ghana. Also, using the adjusted R-square which showed a score of 0.262, it could be explained that

(26.2%) of variation in planning and control was accounted for by the impact of accounting information.

Table 6: The Effect of Accounting Information on Management's Decision-Making (planning and control) in the Technical Universities in Ghana.

Variables	Unstd. Coeff.		Std. Coeff.		Collinearity Statistics		
	<i>B</i>	<i>Error</i>	<i>Beta</i>	<i>t-value</i>	<i>Sig</i>	<i>Tol.</i>	<i>VIF</i>
(Constant)	0.877	0.099		8.880	0.000		
Accounting Information	0.404	0.054	0.516	7.458	0.000	1.000	1.000
R	0.516						
R Squared	0.267						
Adjusted R Squared	0.262						
F-statistic	55.624						
P-value	0.000						
Dependent variable: Planning and control							
Source: Field Survey (2022)						N = 155	

The remaining (73.8%) could be said to have been accounted for by factors other than accounting information. This clearly implies that decision-making processes relative to technical universities in Ghana, to a large extent, are dependent on the extent of accounting information. In other words, it is safe to say that proper decision-making ie planning and control at the various technical universities in Ghana depends on the quality of accounting information available to them.

Further, the results revealed F-statistics of (F = 55.625, P = 0.000). This result indicated that the entire model was significant at alpha value of 0.05. This is to say that, the model can be relied on as far as production of valid and reliable results is concerned. This result together with the value

produced by the adjusted coefficient of determination (adjusted R-square), shows that the model is fit. It should also be pointed out that the variables in the model are devoid of issues of multicollinearity or collinearity as shown by the Tolerance ($Tol. = 1.000$) and the Variance Inflation Factor ($VIF = 1.000$) statistics.

Furthermore, the results showed that accounting information had a positive and statistically significant effect on decision-making relative to technical universities in Ghana i.e. planning and control ($\beta = 0.404$, $t = 7.458$, $P = 0.000$). This suggests that holding all other factors constant, a unit change in the extent of accounting information will lead to a 0.404 unit change in planning and control. Considering the direction of the relationship or the impact, it suffices to say that a unit increase or improvement in accounting information will lead to 0.404 units increase or improvement in the decision making i.e. planning and control. The results displayed relative to the analyses are not strange because good accounting information has a direct link to proper decision-making in every organization or institution where technical universities are no exception. This is to say that, if the quality of accounting information increase it will impact positively on the decision-making and the reverse is true.

However, the findings is consistent with Shuhidan, Mastuki, and Wan (2015), according to Shuhidan, Mastuki, and Wan there is a significant impact of Accounting Information (AI) on the performance of the organization, and there is also a strong relationship between the success of AIS and the performance of the organization. Accounting information occupies a very important place in the architecture of the economic information system,

having the highest degree of certainty and the possibility of an accuracy, as discovered by Floștoiu, (2019) who agrees with the findings of Onaolapo and Odetayo (2012), who discovered that Accounting Information System (AIS) increases organizational effectiveness, particularly in the context of global technological advancement. Again, Gacheru, (2017) affirm that there is a significant relationship between accounting information and strategic decisions and strategic decisions in all the selected areas. It was also revealed from the analysis of the opinion of the respondents that 44.44% of the respondents always use accounting information in making strategic decisions in manufacturing industries in Bangladesh.

The finding is also in line with Socea, (2012), which showed that accounting information has a significant effect on the decision-making process in development associations. He further recommended that to solve financial reporting problems, organizations must invest in continuous short-term training and as well as on information technology tools to advance their efficiency, effectiveness, and their overall performance. Also, Alawaqleh, (2021) found that there was a strong relationship between the use of organizations accounting information and managerial efficiency. It results further revealed that AIS could be used to control fraud and mismanagement. It was concluded that the use of accounting information system enhanced decision making in manufacturing industries.

Further, the current study findings are consistent with Inalegwu, (2018) who found out that accounting information has a statistically significant relationship with both marketing and industrial-related strategic decision-making of companies in Sri Lanka's manufacturing sector. Kanakriyah, (2016)

investigated the relationship between accounting information and decision-making in the Sri Lankan manufacturing Sector. Primary data for the study were collected through questionnaires and surveys. Data were analyzed using Pearson's correlation. The result of findings indicated that accounting information has a statistically significant strong positive correlation with marketing, strategic decision making, and manufacturing-related strategic decision making of companies operating in Sri Lanka's manufacturing sector.

In summary, the results revealed that the information that is provided by accounting is the basis on which decision-making processes both inside and outside of the institution rely. This is due to the fact that accounting provides the data that is required by various users in order to make a fundamental decision. Regardless of whether or not an organization generates a profit, having accurate accounting information is of the utmost importance in order to comprehend the operations of the company and its overall performance. The provision of quantitative data that is essential for organizational planning, control, and evaluation is made possible through the provision of accounting information, which in turn facilitates decision-making.

Challenges Technical Universities Encounter in the Keeping of Accounting Information

The third objective sought to assess the challenges Technical Universities encounter in the keeping of accounting information. To achieve this particular objective, the researcher conducted a descriptive analysis and the result were put in a form of mean and standard deviation to enable comparison and conclusion drawn.

Table 7: Challenges Technical Universities Encounter in the Keeping of Accounting Information.

Statement	Mean	SD
Accounting information of the institution may be lost as a result of computer fraud, data loss issues due to hacks, viruses, damage, and theft of servers.	1.735	.044
The accounting information system in the institution does not provide observation reports about different administrative levels performance at appropriate time.	1.684	.036
The cost of the application of an accounting information system is relatively high	1.832	.099
Cadres that implement the methods of accounting information are not qualified	1.903	.263
Senior management is not convinced by the methods of accounting information system	1.961	.226

Source: Field Survey (2022)

N = 155

From Table 8, the results are on means and standard deviation presenting the level of agreement of the respondents on the challenges Technical Universities encounter in the keeping of accounting information. According to the results, “Accounting information of the institution may be lost as a result of computer fraud, data loss issues due to hacks, viruses, damage, and theft of servers.” with a mean of 1.735 and standard deviation of .044. “The accounting information system in the institution does not provide observation reports about different administrative levels performance at an appropriate time” This is indicated by the total level of agreement of the respondents with a mean of 1.684 and a standard deviation of .036 indicating that the respondents agreed to this fact.

The respondents are also in total agreement to the statement that “The cost of the application of accounting information system are relatively high” with (mean = 1.832; SD = .099); “Cadres that implement the methods of accounting information are not qualified” also had a (mean = 1.903; SD =

.263), this indicates a total agreement to the statement by the respondents as a challenges Technical Universities encounter in the keeping of accounting information. “Senior management is not convinced by the methods of accounting information system.” the respondent completely agrees to this fact with a (mean = 1.961; SD =.266).

The findings are in line with Watty, McKay, and Ngo (2016) which found out that faculty resistance is a major challenge in implementing technology into accounting curricula. Faculty support for changes may be especially problematic if senior faculty are near retirement and unwilling to learn new types of technology or software. However, it is not simply an issue of resistance of current faculty to learn, but also of hiring new accounting faculty who have the expertise to teach technology skills (Hastings, Reckers, & Solomon, 2003). Change often incurs challenges, but which challenges are most impactful in the integration of technology and data analytics into the accounting curriculum is unclear. The resources accounting departments need to implement changes are also uncertain. To explore these issues in more detail, we propose research question four: What are the challenges faced and what resources are needed.

The finding is also inconsistent with Abdul-Rahamon and Adejare (2014) examined the impact of bookkeeping practices on SMEs performance in Nigeria. The study used both qualitative methods and quantitative methods and found that bookkeeping practices is positively associated with SMEs financial performance. Mutu (2015) examined the effect of bookkeeping practices of SMEs in Chuka Town, Kenya on firm growth. The study showed that majority of SMEs were not keeping proper books of accounts and that

bookkeeping practices is associated with business growth. Sibanda and Manda (2016) examined the symptoms of accounting practices that contribute to the failure of SMEs in South Africa. The studies based on a sample of 40 SMEs revealed that majority of SMEs do not keep proper books of accounts and that negatively affect their growth and performance. Proper bookkeeping practices also help business to track their expenditure, evaluate the consequence of certain decisions taking and take corrective actions. Chelimo & Sophia (2014) examined the effect of bookkeeping practices on the growth of SMEs in Kabarnet Town, Baringo County, Kenya. The study based on a sample of 72 respondents revealed that bookkeeping practices is positively associated with the growth of SMEs.

Chapter Summary

This chapter presented the results and discussion of the study. The chapter presented descriptive statistics and regression coefficients. The main results were presented and discussed, giving cognisance of the study objectives. Assessment of the first objective which sought to assess the characteristics of accounting information in Technical Universities in Ghana revealed that the respondents completely agreed with all the statements regarding characteristics of accounting information. Analysis of the second objective showed that accounting information has impact on decision making processes of the technical universities in Ghana, and this effect was found to be positive and statistically significant. Assessment of the third objective which sought to assess the challenges Technical Universities encounter in the keeping of accounting information revealed that the respondents completely

agreed with all the statements regarding the challenges Technical Universities encounter in the keeping of accounting information.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this section is to present the study's conclusions and suggestions, as well as a brief overview of the research conducted. The study's problem, goals, research methods, and analytical techniques are all briefly described in the summary. The purpose of the "Key Findings" section of a research is to provide a concise synopsis of the research most important findings. The conclusions, on the other hand, provide a synopsis of the study's findings and their significance in light of the study's aims. The findings are used to inform concrete recommendations for action that can be taken by specific individuals and organizations. Suggestions for future study are provided at the chapter's end.

Summary of the Study

The managerial positions in an organization, including those responsible for making decisions, have a direct bearing on the organization's level of success. The significance of arriving at decisions through the application of methodical decision-making processes cannot be downplayed by managers in any way, shape, or form. As a direct result of this, it is absolutely necessary for managers to be able to make efficient use of all of the information at their disposal, especially the accounting information. The provision of direction to managers and owners of businesses is the most important function of accounting information; this guidance is used during the decision-making process.

In addition, the process of deciding what course of action to take after recognizing the need to do so, collecting pertinent information, and weighing the relative merits of available options is known as decision making. Information emanating from accounting provides managers with access to the data necessary for them to perform their jobs successfully. The decision made by management is one of the most important aspects that can be found throughout all institutions and can determine whether or not they are successful in actualizing pre-determined goals and objectives. Decisions made by management are among the most significant aspects that are present in all types of institutions. It was against this background that the current study was carried out for the purpose of determining the impact of accounting information on planning and control at the technical universities in Ghana.

The specific objectives the study sought to achieve were: One, to determine the characteristics of accounting information in Technical Universities in Ghana; two, to determine the impact of accounting information on Management's decision-making (planning and control) in the Technical Universities in Ghana; and three, to assess the challenges Technical Universities encounter in keeping of accounting information. To achieve the foregoing objectives, the explanatory research design, in the light of the quantitative research approach, was employed. With respect to sampling method, proportionate random sampling techniques were employed to select the 155 participants from the accessible population. The main tool used for primary data collection for this study was the structure questionnaire containing closed-ended questions. The data extracted were analysed using both descriptive and inferential statistical tools. Specifically, descriptive

statistics such as frequency, percentage, mean and standard deviation; inferential statistics, and regression analysis, were used to analyse the study objectives.

Summary of Key Findings

The first objective sought to determine the characteristics of accounting information in Technical Universities in Ghana. The respondents completely agreed with the statements relative to the characteristic of accounting information in their respective institutions with the highest being “The institution depends on accounting information that is cost-effective”. This clearly implies that the technical universities in Ghana have attached seriousness to accounting information because of its positive impact on the institution and that has led to the results indicated in the previous chapter.

The second objective sought to determine the impact of accounting information on Management’s decision-making (planning and control) at the Technical Universities in Ghana. The results showed that accounting information had a positive and statistically significant effect on decision-making relative to technical universities in Ghana i.e., planning and control. The findings revealed that accounting information actually has an impact on decision-making of these technical universities. The findings actually mean that, if the information obtained by way of accounting information is good, it would affect positively relative to the planning and control of these institutions.

The third objective sought to assess the challenges Technical Universities encounter in the keeping of accounting information. The findings revealed that, respondents completely agreed to the statements regarding the

challenges faced by these technical universities in their quest to keep accounting information with the highest average being ‘ ‘ Senior management is not convinced by the methods of accounting information system’’. This implies that the various institutions are aware of the difficulties concerning keeping proper accounting information and how it affects the institutions negatively.

Conclusion

Considering the findings of the study, the following conclusions could be drawn based on the study objectives. The first objective sought to determine the characteristics of accounting information in Technical Universities in Ghana. The results revealed that, statements regarding the characteristics of accounting information actually exist in the various institutions. This finding was reinforced by the total agreement of respondents relative to the existence to the characteristics of accounting information. Therefore, it can be concluded that, technical universities in Ghana have attached seriousness to accounting information because of its positive impact on their institutions.

The second objective sought to determine the impact of accounting information on Management’s decision-making (planning and control) at the Technical Universities in Ghana. The results showed that accounting information had a positive and statistically significant effect on decision-making relative to technical universities in Ghana i.e. planning and control. Based on the findings of the study, the researcher is safe is to conclude that accounting information influences decision-making ie planning and control. This, therefore, means that if the accounting information produced if it’s of

good quality it would have a positive impact on the decision taken by management. The results suggest that better decision-making would be made if there is an improvement relative to the accounting information and therefore management must put in place a proper accounting information system that would help produce quality accounting information.

Finally, the third objective sought to assess the challenges Technical Universities encounter in the keeping of accounting information. The findings revealed that respondents completely agreed to the statements regarding the challenges faced by these technical universities in their quest to keep accounting information with the highest average being ‘‘ Senior management is not convinced by the methods of accounting information system’’. Therefore, it is proper and accurate to conclude that there are challenges regarding the accounting information of the respective institutions. This assertion is accurate because the respondents strongly admitted to the existence of these challenges based on their responses to the questionnaire.

Recommendations

Having considered the key findings and the conclusions drawn, it was imperative to make recommendations which might positively influence the impact of accounting information on planning and control at the technical universities in Ghana. The researcher, therefore, made the following recommendations based on the current findings and conclusions drawn.

1. The study recommends that policy makers and managers of Technical Universities in Ghana to take the right decision by providing necessary information about an institution’s financial performance and position.

2. Management of the technical universities are advised to organize training regularly for the accounting staff and employees who are associated with the production of accounting information to enable them to produce good and quality accounting information to aid decision making.
3. Management of the technical universities should consider recruiting qualified accounts staff with the requisite skills and knowledge so that accounting information produced by these people can be trusted and be relied upon to make decisions.
4. Management should make an effort by providing adequate accounting information systems that would lead to the production of quality accounting information.

Suggestions for Future Research

Considering the gaps identified in the literature and the limitation of the current study, a number of topics could be suggested for further studies. For instance, from the literature reviewed, it was revealed that no study has yet been conducted in Ghana relative public or private universities regarding accounting information and therefore the researcher suggests that in the future, a study can be conducted in these institutions. The researcher also suggests that in the future a study of this nature can be carried out in other sectors of the economy in Ghana or Africa.

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APPENDICES

UNIVERSITY OF CAPE COAST

COLLEGE OF HUMANITIES AND LEGAL STUDIES

SCHOOL OF BUSINESS (DEPARTMENT OF ACCOUNTING)

QUESTIONNAIRE

I am a student of University of Cape Coast (UCC), admitted into the School of Business and in the Department of Accounting. As part of the programme, I am undertaking descriptive research on the topic “Assessing the Impact of Accounting Information on Planning and Control in Technical Universities in Ghana.” I would be grateful if you could help me in answering these questions. You are kindly requested to read through the items and your responses will be treated as confidential and will be used for academic purposes. Your confidentiality will be maintained since your name is not required. Thanks for taking time to help with this research.

SECTION A: GENERAL PROFILE INSTRUCTIONS

Please tick (✓) the option given below that best describes your answer.

1. Sex: Male [], Female []
2. Age of respondents: Under 20 [], 21-30 [], 31-40 [], 41-50 [], Above 50years [].
3. Length of service (in years): (a) Less than 2 [] (b) 2-4 [] (c) 5-7 [] (d) More than 7 []
4. Educational level of respondents: 1. HND 2. Bachelors 3. Masters 4. Ph.D.

SECTION B: CHARACTERISTICS OF ACCOUNTING INFORMATION

Please indicate the extent to which you agree with the following statements by using a scale of **1 to 5** where **1=strongly agree, 2=agree, 3= neutral, 4= disagree, 5= strongly disagree**

No	Characteristics of Accounting Information.	1	2	3	4	5
CAI1.	The institution currently has accounting information system.					
CAI2	Reliance of the institution on accounting information increases effectiveness.					
CAI3.	The institution should depend on accounting information that are relevant.					
CAI4.	Accounting information provides the institution with information that are accurate.					
CAI5.	The institution depends on accounting information that is cost-effective.					
CAI6.	Accounting information provides information that is clear in nature to the institution.					
CAI7.	information improves on the timeliness of information in the institution.					

SECTION C: PLANNING AND CONTROL OF PUBLIC TECHNICAL UNIVERSITIES.

No	Planning and controlling	1	2	3	4	5
PC1.	The use of accounting information contributes significantly in increasing planning operation effectiveness at the institution.					
PC2.	The management depends on accounting information to estimate the number of planning budgets for the institution.					
PC3.	Accounting information in the institution provides a basis for planning financial and human resources.					
PC4.	Planning and control of the institution are processed on the basis of information provided by the accounting information system.					
PC5.	The institution management conducts observation on implementing the activities and established plans in all work stage depending on the available accounting information.					
PC6.	Accounting information helps in following up on the effectiveness of the decisions at the institution.					
PC7.	The accounting information has a great significance by the institution perspective in improving level of strategic plans					

PC8	Information needed for decision making are extracted from accounting information systems.					
PC9	Accounting information on previous plans enhances future decisions.					

SECTION D: ACCOUNTING INFORMATION OF PUBLIC TECHNICAL UNIVERSITIES

	Accounting Information of public technical universities	1	2	3	4	5
CI1.	The use of AI allows our finance staff to save a lot of time					
CI2.	The use of AI enables finance staff to manage their tasks effectively.					
CI3	Accounting Information makes the communication easier among the various departments.					
CI4	It made an integration and consistency among departments faster.					
CI 5	It provides accurate and valid information.					
CI 6	It makes the information more credible and understandable.					
CI 7	It provides adequate information at right time					
CI 8	It eliminates the repetition of paper transactions and storage space.					

CI 9	It helps the management to take timely decisions.					
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SECTION E: CHALLENGES OF KEEPING PROPER ACCOUNTING

RECORDS

No	Challenges of Keeping proper Accounting Records.	1	2	3	4	5
CKR1.	Accounting reports in the institution contributes directly in establishing observation procedures and internal observation.					
CKR 2.	Accounting information system in the institution provides observation reports about different administrative levels performance at appropriate time.					
CKR 3.	Cost of the application of accounting information system are relatively high.					
CKR 4.	Cadres that implement the methods of accounting information are not qualified.					
CKR 5.	Senior management is not convinced by the methods of accounting information system.					