

NEAR EAST UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES DEPARTMENT OF BANKING AND FINANCE BANKING AND ACCOUNTING PROGRAM

THE ROLE OF MANAGEMENT ACCOUNTING INFORMATION IN MAXIMISING ENTERPRISE VALUE THROUGH RATIONALISATION OF DECISIONS

NINA HASSAN

MASTER'S THESIS

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THESIS SUPERVISOR
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NICOSIA 2020

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DECLARATION

I Nina Hassan, hereby declare that this dissertation entitled " The Role Of Management

Accounting Information In Maximising Enterprise Value Through Rationalisation Of

Decisions" has been prepared myself under the guidance and supervision of "Assoc.

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DEDICATION

..... To My Family

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utmost gratitude that I would like to express my sincere appreciation to my advisor Assoc. Prof. Dr. Turgut Türsoy for his outstanding and remarkable insights. His contribution greatly played a vital role in the successful completion of this study. An unimaginable token of appreciation goes to my father Rabson Andrea, mother Redi Andrea, my elder brother Munyaradzi Andrea for their unwavering support.

ABSTRACT

THE ROLE OF MANAGEMENT ACCOUNTING INFORMATION IN MAXIMISING ENTERPRISE VALUE THROUGH RATIONALISATION OF DECISIONS

The study examines the role of accounting information in maximising enterprise value through the rationalisation of decisions. Focus is also placed towards identifying potential challenges or drawbacks encountered in the effective use of accounting information and the extent to which decisions can be rationalised. Questionnaires were collected from 74 Cihan Bank bottom, middle and top level employees. The collected findings were analysed using multiple regression analysis method. It was noted that an increase in the ability of the bank to use management accounting information for strategic investment purposes has a positive effects on the banks performance. The results revealed that the use of management accounting information to manage the bank's risks is negatively related with the banks' performance. Further results also showed that the use of management accounting information to provide information to the bank is positively related with the banks' performance. It was also shown that the use of management accounting information for making operational decisions is positively related to the bank's performance. It was recommneded that other sources of information and strategies must be used to increase the available information and reinforce the quality of decisions made by the banks The study implies that management accounting information plays a vital role in decion making and ought to be used in banks and non-bank institutions.

Keywords: Enterprise value, marketing decision making, operational decisions making purposes, Strategic investment purposes, rationalisation of decisions, risk management purposes.

THE ROLE OF MANAGEMENT ACCOUNTING INFORMATION IN MAXIMISING ENTERPRISE VALUE THROUGH RATIONALISATION OF DECISIONS

Çalışma, kararların rasyonelleştirilmesi yoluyla muhasebe bilgilerinin işletme değerini en üst düzeye çıkarmada rolünü incelemektedir. Muhasebe bilgilerinin etkin kullanımında karşılaşılan potansiyel zorlukların veya dezavantajların ve kararların ne ölçüde rasyonelleştirilebileceğinin belirlenmesine de odaklanılmaktadır. 74 Cihan Bankası alt, orta ve üst düzey çalışanından anket toplanmıştır. Toplanan bulgular çoklu regresyon analiz yöntemi kullanılarak analiz edildi. Bankanın yönetim muhasebesi bilgilerini stratejik yatırım amaçlı kullanma yeteneğindeki artışın, bankaların mükemmellik üzerinde olumlu etkileri olduğu kaydedildi. Sonuçlar, bankanın risklerini yönetmek için yönetim muhasebesi bilgilerinin kullanılmasının, bankaların performansı ile olumsuz ilişkili olduğunu ortaya koymuştur. Diğer sonuçlar, bankaya bilgi vermek için yönetim muhasebesi bilgilerinin kullanılmasının, bankaların performansı ile olumlu ilişkili olduğunu da göstermiştir. Aynı zamanda operasyonel kararlar vermek için yönetim muhasebesi bilgilerinin kullanımının bankanın performansı ile olumlu ilişkili olduğu gösterilmiştir. Mevcut bilgileri artırmak ve bankalar tarafından alınan kararların kalitesini güçlendirmek için diğer bilgi ve strateji kaynaklarının kullanılması önerilmiştir. Çalışma, yönetim muhasebesi bilgilerinin bankalarda karar vermede hayati bir rol oynadığını ve bankalarda kullanılması gerektiğini ve banka dışı kuruluşlar.

Anahtar Kelimeler: İşletme değeri, pazarlama karar verme, operasyonel karar verme amaçları, Stratejik yatırım amaçları, kararların rasyonelleştirilmesi, risk yönetimi amaçları.

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ABBREVIATIONS

AIS: Accounting Information System

DM: Decision Making

EAIS: Electronic Accounting Information System

EP: Enterprise Value

FASB: Financial Accounting Standards Board

INFR: Informational Roles

IT: Information Technology

RM: Risk Management

IMA: Institute of Management Accountants

OLS: Ordinary Least Squares

SIP: Strategic Investment Purposes

SPSS: Statistical Package for Social Sciences

INTRODUCTION

Background of the study

Information is vital to the effective functioning of an organisation. This is because it allows managers to make rational decisions which contribute towards the performance and growth of the organisation (Buljubašić & Ilgün, 2015). This is because organisations are always faced with alternatives from which they have to make decisions and each decision will either contribute to the success or downfall of the organisation.

Managers of an organisation strongly rely on financial information to make sound corporate decisions especially those that pertain to investment. Business owners on the other hand often entrust managers with financial and non-financial resources from which they have to make the best and effective use of those resources (Berisha & Xhelili, 2017). Thus, having access to accounting information will thus help managers in making good decisions that contribute towards profit maximisation and ensure long term survival. This is important because the effectiveness of management decisions will be reflected by the nature of decisions they make (Collier, 2015). Failure to do so, can thus be considered as ineffectiveness, inefficiency or incompetency.

On the other hand, the idea behind the rationalisation of accounting information implies that there exists certain information which when used alone fails to contribute towards effective decision making. With regards to rationality, all the decisions made by managers must be rational at all cost (Speier, Valacich & Vessey, 1999). That is, on a financial and non-financial perspective, the decisions must show positive gains made by the organisation. Rationality in this case can thus be considered to be part of a cost benefit analysis in which managers desire to maximise profits and minimise costs.

Such aspects are important especially when the company desires to persuade its shareholders to continuously inject more financial resources into the company. Such is the case with telecommunications companies in Northern Iraq which have significantly witnessed huge positive changes in their enterprise values. The positive gains can be attributed to innovative improvements made by the telecommunications companies which

extend to include the introduction of new management accounting information systems. This study therefore seeks to examine the role of accounting information in maximising enterprise value through the rationalisation of decisions.

Decision making is the method of determining alternative ways of progress utilising cognitive methods. Establishing decisions is necessary when there are no possible solutions to adopt. Accounting methods aid decision making by presenting knowledge related to organisational activities. Accounting systems also provide ways of checking information validity with the aid of accounting and auditing activities (Wadia, 1966). Thus, practical and dynamic accounting knowledge performs a pivotal position in decision making.

Reliable accounting serves a practical function for the firms themselves. Beyond the regulatory and compliance hurdles that financial accounting helps clear, financial accounting also helps managers create budgets, understand public perception, track efficiency, analyze performance and develop short- and long-term strategies (Boyd & Cox, 2002).

In this study three decision areas such as financial decision, investment decision and dividend decision were selected. These different areas of decision somehow or in one way or the other solely depends on accounting information (Speier, Valacich & Vessey, 1999). Without accounting information individuals, companies or business organization into various kind of investments cannot determine financial investments and dividend decision to be taken. Accounting information helps to take long term investment decisions by giving the proper view of present and future conditions of the organization (Berisha & Xhelili, 2017). This study is initiated to evaluate the importance i.e. the impact of accounting information on decision making process.

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Research problem

It important to note that rationality is an important aspect or feature of any activity whether at individual, corporate or national level. But the attainment of rational outcomes is not always feasible and in most cases it is surrounded by obstacles. For instance, the principle agent theory highlights the existence of potential conflict in interests between managers and owners of the business (Boyd & Cox, 2002). Which implies that the basis and point of reference from which rationality will be examined will vary. This can be supported by ideas given by Millo, Barman and Hall (2016) which exhibits that managers are often interested in profit maximisation and yet the idea should be value maximisation. Such will have an effect on what is termed a rational decision and from whose perspective is a person examining the rationality of decisions made using accounting information. This imposes contrasting ideas on the role of accounting information in maximising organisational value is subjective. Studies by Checon (n.d.), Granlund and Teittinen (2017) and Heidhues and Patel (2019) strongly suggests that the rationalisation of decisions using accounting information is more likely to result in enterprise value maximisation. To make matters worse, the definition of enterprise value is surrounded by different ideas which differs on certain points of observation. For instance, enterprise value is considered to be a measure of the total value of an organisation (Buljubašić & llgün, 2015). Yet it is also defined as the an indicator of how the market attributes value to a firm as a whole (Rabei et al., 2015). Which entails that value maximisation itself can vary with attributes or indicators used to measure enterprise value. Under such cases, it becomes relatively difficult to examine how the rationalisation of accounting information will contribute towards enhancing enterprise value. The other problem is related to the financial aspects of value maximisation and value maxsimisation may sometimes include non-financial aspects such as corporate social responsibilities. Hence, the problem therefore remains as to the exact role of accounting information in maximising enterprise value through the rationalisation of decisions.

Research objectives

The main emphasis of this study is to examine the role of accounting information in maximising enterprise value through the rationalisation of decisions. The study also seeks to identify potential challenges or drawbacks that may be encountered in the effective use of accounting information and the extent to which decisions can be rationalised. This will also include finding ways through which organisational managers can use accounting information to maximise enterprise value.

Significance of the study

The study contributes towards the development of strategies that add to enterprise value maximisation. In addition, it also highlights key theoretical ideas about value maximisation which need empirical attention. The study also outlines possible drawbacks that may be encountered for relying on accounting information and offers possible suggestions on some of the non-financial information and indicators that can be used to make rational decisions and maximise enterprise value.

Organisation of the study

The study will be structured into five parts. The first part of the study provides a background of the study which includes the research problems and objectives of the study. This also includes an outline of some of they issues faced by governmental organisations such as Northern Iraq's telecomunications organisations. The second part provides a review of the related literature while the third part looks at the methodological steps that were used to carry out the study. The fourth part of the study will deal with the analysis of the collected data while the last part concludes the study by deducing conclusions and offering recommendations on ways to improve the use of accounting information in a manner that enhances enterprise value.

CHAPTER ONE

RELATED LİTERATURE

1.1 Introduction

Though there exist a lot of empirical ideas about the use of accounting information in decision making, more still needs to be done to look at how accounting information can be rationalised to increase enterprise value. Kanani (2016) did a study that looks at the the effects of accounting information on decision making. The study results showed that the benefits of using accounting information are mainly restricted to lending, dividend, financiang and investment decisions. The methodology does not offer explanations of the ways through which the use of accounting information contributes towards improving decision making. The study also manages to highlight that the use of accounting information is always associated with external reporting, manual work, and technological challenges. These challenges can thus undermine value maximisation in as far as credibility, social responsibility and time management are concerned.

1.2 Theoretical literature review

This section provides details about the elements and principles of accounting information and how they can be used to highlight the benefits derived from using accounting knowledge to formulate and implement decisions in banks. This was accomplished by laying out various explanations of accounting ideas and speculations of the role of

accounting information in the formulation and execution of decisions by banks. A review of the accessible accounting studies on the thoughts and principles related to this study were also looked upon in this chapter. As such, it will help the researcher to establish a theoretical and empirical base of weighing the established research findings.

The accounting theory considers that there are a combination of methodologies and assumptions that can be utilised to provide a guide through a set of standards are developed so as to assist with the reporting of financial information (Frank et al., 2008). Thus, the accounting theory is based on the idea that both historical and modern accounting practices be reviewed and used to prepare financial statements in line with current developments and trends. This is important because it helps to capture current market, industry and economic developments, and incorporate them as part of the decision-making process. Hence, making it feasible for managers to disclose all the pertinent information about the business. A study by Boyd and Cox (2002), also acknowledges that both financial reporting and financial statements are governed by a given set of stipulated rules and regulations which are bound to change over time. Hence, affecting the way financial details of the company are disclosed to both investors and individual members of the company.

It states that is a set of assumptions and methodologies used in the study and application of financial reporting principles. The study of accounting theory involves a review of both the historical foundations of accounting practices, as well as the way in which accounting practices are changed and added to the regulatory framework that governs financial statements and financial reporting.

One of the notable things about accounting principles and theories is that they are all based on what is known as a conceptual framework which was established by the Financial Accounting Standards Board (FASB), (Frank et al., 2008). It is through this framework that reporting standards are set for both private and public companies. The other benefit of using accounting theory is that it serves as a tool which can be used to guide and examine the use of accounting standards. Apart from this, new accounting procedures and practices (Boyd & Cox, 2002).

Meanwhile, the application of accounting standards and/or principles has an effect on the preparation of financial statements and this in turn affects the disclosure and use of financial statements (Berisha & Xhelili, 2017). Thus, the use of such financial statements and the information there of to make decisions is determined by the extent to which users of such financial statements are able to breakdown the concepts into understandable details. In addition, the use of the accounting framework also imposes effects on the interpretation of financial statements through its underlined four assumptions (Boyd & Cox, 2002).

The initial assumption contends that there is a separation between ownership and control and this often relates to the relationship between managers and the shareholders of the company (Speier, Valacich & Vessey, 1999). This also extends to include the way managers of the organisation make decisions (profit maximisation and value maximisation). Such decisions determine who benefits the most and have long run effects on the company in terms of perfirmance, value and growth. The other assumption pertains to the idea that the business will not be declared bankrupt while the third assumption mentions that amounts of a currency are used as a base of measuring the transactions (Boyd & Cox, 2002). The fourth assumption relates to the period in which the financial statements are prepared and in this case it can be monthly, semi annually or annually. All of these assumption have a greater role to play in the preparyion and disclosure of financial details. As a result, they affect the way decisions are made either by managers or shareholders. Of huge importance, is the observation that these assumptions will have an effect on the roles of accounting information in decision making by banks.

1.3 Objectives of accounting activity

The provision of accounting information stems from accounting activities and hence it is important to have a good understanding of accounting activities. Drury (2008) asseryts that the main purpose of accounting activities is to provide information that can be used to manage a business entity in a way that enhances its value. This value enhancement process involves the making of a series of decisions out of a given set of courses of actions which managers must choose from. As a result, the decision making process can

be said to be linked to three interrelated management processes of planning, directing, and controlling as depicted in Figure 1.1.

The planning process involves the determination of an organisation's goals and visions and mapping ways through which such goals and visions can be attained (Drury, 2008). Alternatively, it can be viewed as the conversion of goals and visions into specified means of activities and resources which help to ensure that such stated goals and visions are attained (Walther & Skousen, 2009). Managers are reponsible for making sure that all the stipulated plans are put to effective and tangible activities through the initiation and directing of organisation activities. Putting objectivies into action is a notable way of making sure that the company reaches stated goals and attains a desired level of performance. However, organisational activities do not always go as planned and there always exist some risks that some adverse outcomes will be observed. This is the main reason why managers must be well equiped and prepared to identify and deal with potential deviations in courses of actions and outrcomes which hinders the attainment of the stipulated goals and visions (Drury, 2008). Walther and Skousen (2009), considered such activities to be known as controlling activitides whose sole aim is to make that the realised outcomes follow the established plans. The control process also includes a number of aspects such as performance measurement and evaluation which sees observed outcomes being compared against the set targets over a given period of time. It is through these acticvities and processes that business value is creat (Drury, 2008).

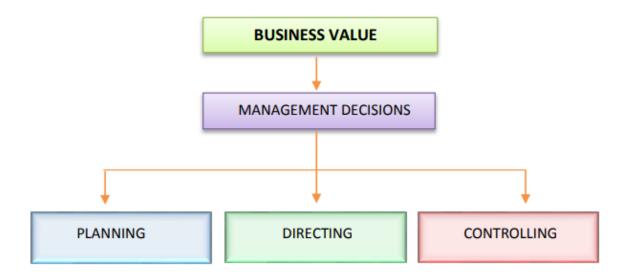


Figure 1.1: Managerial decisions making activities

Source: Buttefield (2019)

Meahwile, management accountants have different roles to play in an organisation and these roles differ between institution. The reasons why such roles vary from institution to the other is simply because of the nature of the industry, organisation culture, type of the organization and together with the size of the organization (Ahid & Augustine, 2012). It is also important note this is also mainly because activities carried out by business organisations can vary a lot and also business circumstances are increasingly getting unique and different (Hilton, 2009). Hilton further states that management accountants are vital for the following reasons;

- Examining the competitive position of the firm and working with other organisational managers to ensure that the firm maintains a competitive position in both the market and industry.
- 2. Engaging in performance evaluation of entire business activities irrespective of the level and nature of operations involved.
- 3. Maing sure that decision makers have the right information at the right time.
- 4. Providing information for decision-making and planning
- 5. Assisting managers in directing and controlling operational activities

6. Making sure that employees and managers are well motivated to carry out their duties.

Information is usually made available to managers, shareholders and other stakeholders using periodis reports. These resports are used to analyse both the activities and performance of the business. Drury (2008) contends that such evaulations and examinations are carried out so as to ensure that the outlined objectives are being attained. Such is vital as to it aids in identifying areas which need attention and improvements so that corrective action can be taken to address imbalances or discrepancies. Moreover, this is an important way of ensuring that there is a high level of effeciecny and effectiveness being miantaned by the organisation.

Creţu and Gheonea (2011), noted that the provision of information is critical for enbaling organisational managers to evaluate their own course of actions. The evaluation process encompasses the quantification of organisational objectives and goals using budgets so as to enhance the effectiveness of the adopted both strategic and operational decisions. As a result, accounting information is widely known as an important source of information about internal business activities (Atrill & McLaney, 2009; Ahid & Augustine, 2012; Creţu & Gheonea, 2011). İt is through this information that value is created by effectively managing, controlling and planning organisational activities. İt is further noted from a study by Ahid and Augustine (2012), that accounting information is vital for decision making because it it helps (1) to determe costs and benefits, (2) develop long-term strategies and plans, (3). allocating resources and (4) control and evalute business performance (see Figure 1.2).

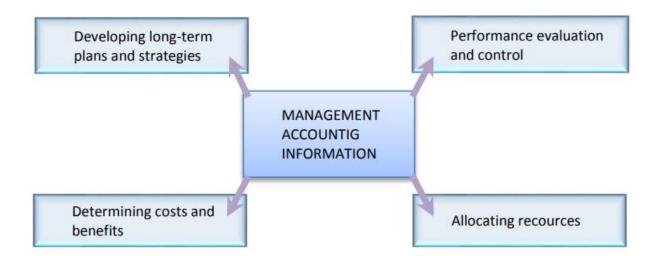


Figure 1.2: Management decisions requiring management accounting information

Source: Atrill and McLaney (2009, p. 23)

The purpose of management analysts differs from one business to the other with regards to industry, culture, type and size of the organization etc. These circumstances also vary with time and nowadays the duties of management analysts have changed over the past years (Atrill & McLaney, 2009). Notwithstanding, such variations have not significantly changed the fundamental tasks of management analysts, but control and influence the complexity of their roles (Hilton, 2009). Most importantly, management analysts are considered to be vital for developing strategies that enhance the value of the organisation (Ahid & Augustine, 2012).

Accounting information is deemed to be beneficial for generating relevant goals, long-term tactics and plans which assist with the examination of the business' performance by examining the business' established standards and create a platform for determining which procedures are best suited to address such issues. Moreover, information is vital for controlling and allocating insufficient company resources efficiently and effectively to produce the best possible level of output. This also includes the use of information to conduct a cost-benefit analysis and making the best decisions that provide more benefits to the organisation as opposed to costs (Davenport & Prusak, 2000). Choo (2003) asserts that organizational knowledge works best when formulated on the right standards of

information to develop a broader system of activities which the company uses to build uniform assigned suggestions about its identity and actions.

1.4 Decision-making in organizations

Giving management accounting as a key component of decision-making and administration claims that the understanding of management functions and management accounting be based on the setting of decision-making. Before this, a decision-making cab said to be a method of choosing one or more alternatives from a given set of decisions. Generally, decisions are choices of the sequence of action heading to a certain coveted goal. This entails that decision-making is not done in a random manner which culminates from the process of selecting one out of a choice of alternative courses of action. (Greenberg & Baron, 2008).

The most important aspect of feature about decision-making is that it is an integral part of out everyday activity and revolves around everything that we do. Individuals thus either make decisions or contribute to the decision making process. Such decisons are based on information collected from intuition, experience or facts. The reasons why individuals and corporation are believed to be making problems is that they want to deal with problems (Burstein & Holsapple, 2008). Thus, it is from solving these problems that they derive satisfaction and enhance their performance levels by assuming a proper corrective action.

Expectations, situations, rules, identities and preferences are all formed out of creating knowledge from a complex organisational environment. As a result, firms execute decisions so as to influence the environment in which they operate in, change their identities and preferences (Greenberg & Baron, 2008). Thus, decision making is considered to be one of the most influential and important exercises undertaken by an organization (Shapira, 2010). This is because businesses are based on the making and formulation of decisions all the time. The decision-making theory applied in this research centres on a blend of two methods (knowledge management and managerial decision-making). The theory aims to advance the study judgments

1.4.1 Managerial decision making

A company compromises of individuals and these individuals are what constitute a company. Thus, a better understanding of the idea that individuals are responsible for making resolutions in an institution. Shapira (2010), contends that individuals are the ones who establish organisational roles, responsible for structuring and processing activities, and laying out the required procedures needed to make effective decisions. Hence, considering these ideas makes an organisation to be considered as having logical and systematic processes which provide the best alternative way of addressing the corporate interests.

Decision making is deemed to be a vital management exercise that involves choosing the best alternative out of an existing number of decisions (Burstein & Holsapple, 2008). Thus, decisions are thus, a product of stipulated processes (Greenberg & Baron, 2008, p. 380). This is necessary for business entities to survive and grow. Decision making is thus viewed to be a process through which an organisation. The objective of this decision-making process is to move the organisation from its contemporary position to a desired projected state

1.4.2 Types of decision-making basing on investment

The decision-making process tend to vary and, in most cases, varies according to the type of decision that is being made. For instance, it was revealed that one of the notable types of decisions that can be made by firms are programmed decisions (Kennedy, 2013). Koud (2007), considers these types of decisions to be responsible for the establishment of corporate procedures and rules. That is, they are formulated based on existing written or unwritten policies so as to deal with both difficult and uncomplicated problems. The major problem with programmed decisions is that they tend to reduce the amount of freedom decision makers will have. This reduces the extent to which decision makers will be flexible enough to make the best possible decisions. However, they are advantageous because they result in a reduction in the amount of time spent carrying out certain activities (Kennedy, 2013). On the other hand, Kennedy (2013), programmed decisions are

employed to solve non-routine obstacles. If a problem does not develop at a high-level frequency, then it is recommended that it be handled using non-programmed decisions.

1.5 The roles of accounting information in organisations

Accounting information plays significant roles in an organisation. This chapter provides information on the major roles of accounting information in an organisation.

1.5.1 Accounting information as a source of organisational knowledge

It is clearly importance to note that information enhances knowledge and the same can be said about the use of AIS in an organisation. A study by Nonaka et al. (2008) reinforced that AIS changes the way individuals think and thus causing them to generate and disseminate more knowledge. The ability to think and generate more knowledge in an organisation revolves around the activities of an organisation. Thus, AIS will be in a position to provide more knowledge when it considers what is taking place in an organisation. Of which the knowledge creation process revolves around the synthesis of individual actions and thinking processes. The importance of creating kniwledge is importance especially in the era where competition is increasingly getting intensive (Nonaka, et al., 2008). Thus, lack of understanding about human activities and organisational activities can hinder organisations from making the best use of generated knowledge. As a result, such organisations can end up seccumbing or exposed to too much organisational pressure from competitors as the operational environment continues to get complex environment. Information can be effectively and strategic processes by simply having a better understanding of the organization and this is termed "knowing organization" (Choo, 2006). Thus, decision-making is based on the premise of good knowledge creating and they all revolve around a a perpetual series of education and adoption. Such an assiciation can be illustrated using Figure 1.3. the figure illustrates that the production of information in one mode serves as a source of information for use for other modes.

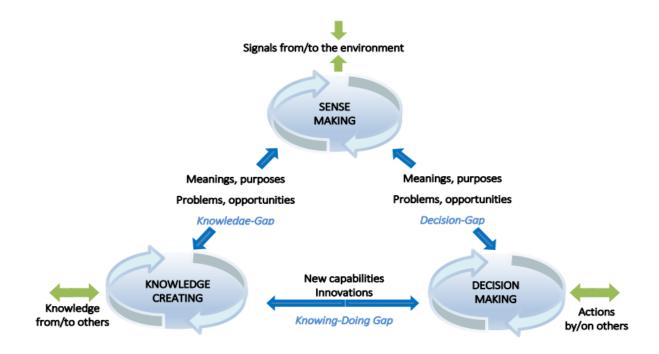


Figure 1.3: The knowldge cycle of an organisation

Source: Butterfield (2016)

Due to the nature of uncertain and dynamics of the business environment, the production and provision of information is vital inenvironment characterised by a lot of changes. This will help an organisation to help understand what is taking place in its environment and thereby formulate objectives and deciasions that improve the performance of the organisation. This is also because an organisation's level of failure and success is determined by the way it responds to changes in market dynamics and forces. Hence, the organisation's range of influence and identity are determined by the established legal structures and fiscal ground. In addition, the organisation's reach and role are also shaped by societal norms and public opinion. Furthermore, idea by Choo, 2006) showed that there is a strong interconnected relationship that exists between an organisation and its environment. Thus, it is importnat to ensure that the organisation keeps track of such changes and devise better ways of dealing with organisational and environmental changes. Cues and signals are produced from changes that take place in both the organisation and its external environment. But the problem is that the generated informaion might be vague and complex to process and this requires the provision of

accounting information to decompose the information into meaningful and useful details. Better decisions can thus be made based on the provision of detailed and structured information which managers and investors can put to effective use. This will help to warrant continuity of existence and sound growth in organisational performance.

Meanwhile, it is huge importance to establish that organisations will be much more capable of making sound strategic decisions when they are capable of generating new knowledge. Proceses are thus need to create, structure and process details and convert them into organisational knowledge. Organisations must go through a process of organisational learning so that they can be capable of generating ideas and convert them into knowledge. Choo (2003) noted that organisational knowledge can be classified into cultural knowledge, explicit knowledge and tacit knowledge. These diverse types of knowledge are derived from different sources and hence it is important for organisations to strongly consider society's norms, beliefs and values, organisational procedures, routines and rules, and individuals' level of experience and expertise.

Choo (2006) believed that organisation always focus on developing their own form of cultural, explicit and tacit knowledge. The ability of an organisation to survive, grow and expand into other markets is thus based on the ability of the organisation to generate and make use of these three forms of knowledge. This entails that the inability to produce and put to effective use the combined forms of knowledge poses survival threats to an organisation.

Organisations that are capable of convcerting the acquired knowledge into valuable and more meaningul activities that adds value are in a much greater position to attain a competitive advantage. That is, knowledge plays a vital role when it has been put to effective use. It is through this knowledge that organisations will be able to maximise performance and gain an urge which they can use to continouasly develop itself (Choo, 2003). Moreover, the extent to which an organisations grows is also influenced by this knowledge conversion process. In addition, good decisions are also made based on this knowledge convcersion process. A study by Choo (2006), revealed that the avauilability

of tacit knowledge stirs up the availability of more options which an organisation can choose from. A study by Thierauf (1999), outlined that the inability of an organisation to make good decisions is mainly because they lack tacit knowledge. Having more alternatives from which an organisation can choose from is what causes it to choose the best laternative. This is mainly because more information would have been drawn to provide an organisation with alternatives from which it can choose from. Thierauf (1999), further states that organisations are always in need and search of alternatives to base their decisions. Rationality in this case is therefore, the ability of organisational managers to choose the best alternatives out of all the existing or provided strategies (decisions). However, Choo (2006), contends that it is not always possible for individuals to come up with a set of different alternatives to choose from. This is mainly because employees' ability to look for and process information in a rational manner is limited. Hence, there are complexities and uncertainties that compromises the effectiveness of the decision making process.

Given all the abobe mentioned details, it is therefore entails that information has to continously flow between organisational members so as to aid them to make rational decisions. Moreover, the ability of organisations to create and enhance the availability of tacit knowledge is important for making sound decisions. The knowledge creation process can be organised in a way that causes an increase in organisational innovation and capabilities. These activities are in turn related to creativity, intelligence and innovation. Thus, the acquisition and provision of tacit and other forms of knowledge prepares the organisation for benefiting from increased organisational performance that emanates from good decisions made by the organisation.

Meanwhile, Thierauf (1999), contends that organisations that can leverage their knowledge sources will be in a position in such a way that it benefits in three distinct ways. Foremost, the organisation will be in a much better position to respond to competitive pressure in the best way and earliest possible time. This is important especially after considering that the business environment is increasingly getting more competitive and posing a lot of challnges for organisations. Secondly, it causes the organisation to have a better examination of its strengths and weaknesses. Thirdly, Thierauf (1999), considers

that it also causes organisations to benefit from increased internal efficiency which helps to boost productivity levels. The reasons being that company managers are well versed, alert and prepared to handle organisational threats as well as take advantage of orga isational opportunities. This according to Choo (2006), is important for making its easy for the organisation to adapt to changes in its environment.

1.5.2 The role of accounting information on investment decision

There are a considerable number of studies that examine the relationship between accounting information and investment decision. For instance, a study by Tyll and Pohl (2014), established that there is a positive interaction between accounting information and investment decision. This entails that both an increase and improvement in the availability of accounting information will result in an improvement in investment decisions made by firms. The existence of a positive relationship between accounting information and investment decision has been subjected to a lot of controversies. For instance, Michael (2013), posits that there are potential instances were a negative relationship between accounting information and investment decision can be obtained. That is, the use of accounting information can sometimes cause a decline in the quality of investment decisions made by managers. Tyll and Pohl (2014), highlighted that there are vast improvements and benefits that can be obtained by capital market firms by using accounting information in Czech Republic. However, Tyll and Pohl mentioned that ambiguities in the use of accounting information stand as a major hindrance to the use and importance of accounting information by firms. The other reason is that accounting information is subject or more prone to suffer from errors. Meaning that errors affect the reliability and validity of accounting information when making decisions. Wrong decisions can be made when wrong information is provided and hence it is important to ensure that correct and accurate information is provided all the time.

Michael (2013), established that the extent to which investors rely on the use of published financial details is determined by the authenticity of the information. The study was carried out using information collected from Nigeria's public sector. Investors often at times make decisions based on information depicted in the financial statements. Hence, due diligence

and adequate care must be given when preparing and organizing accounting information. The established results showed that accounting information is of huge importance and its use among investors is high. Also, good investment decisions are made on the premise of good and high-quality information. In addition, the study also suggested that studying the effects of accounting information on investment decision is sometimes difficult. This is because of the use of a lot of methods to calculate and determine certain investment indicators. As a result, the study suggests that well advanced financial algorithms and systems be used to compute and estimate the required models and indicators.

Hafij et al. (2014), noted that good management decisions are made on the availability of high-quality information. Of which, the provision of high-quality information is based on the use of prescribed accounting standards. Njau (2000), contends that accounting information be prepared to specifically cater for two important aspects. The first aspect is to ensure that information is prepared based and along with the stipulated accounting standards so as to cater for the objectives of financial reporting. The second aspect involves the preparation of financial information with the sole of aim of fulfilling the required economic decision-making targets. The importance of making these tow distinct categories is that it makes it possible to prepare financial details and reports to meet the desired objectives. This will also help to make sure that the prepared financial statements remain meaningful and useful to their intended users.

A study by Adebayo et al. (2013), hinted that good investment decisions rely on the provision of sound accounting information. The study employed Pearson's correlation test and regression analysis to examine the effects of AIS on the decision-making abilities of firms in the private sector. The results showed that AIS is vital when making important investment decisions. However, this effective use of accounting information requires investment in information (IT) technology. This is because IT is there to foster efficiency and effectiveness in the use of organizational resources as well as the making of good investment decisions. This is also established by looking at the overall performance of the business.

Much of the information that is desired by investors pertains to risk, profitability and liquidity and financial information helps investors to have an indication of the nature of

risks, profits and liquidity scenarios they are bound to face if they are to invest in that particular firm. Moreover, financial information provides more information about the use of investors' and/or shareholders' funds. This also includes an effective use of an organisation's assets. As a result, it is worthy to establish that the effects of financial information on decision making is subjective but under normal circumstances it aids firms in making good investment decisions.

1.5.3 Information as a competitive asset

Fahey (2009), noted that the nature of market, business, econonic and global complexities makes it a challenge to make certian important decisions. Consumers on the other hand, are increasingly getting subjected to a lot of sophisticated changes which require a special approach to be used by firms so as to lure them to continually engage them into dealing with the firm. These issues require innovative and well advanced business tools that are capable of analysing the provided information and present it in a meaningful way that is easy to understand. Moreover, firms are more likely to gain a huge competitive advantage when such advanced business tools are used to analyse and present financial information.

Porrini and Starbuck (2015), noted that an increase in the amount of data that needs to be processed forces firms to adopt new ansd well advanced technological tools. Such an innovative drive results in a fast and effective way of analysing, processing and presenting information. Nowadays, competitive firms are those that are able to process and presenting information in an easy and cost effective way and make a move before other competitors do so. Marshall et al. (2015), highlighted that good quality information that is provided at the right time at a low cost provides firms with an ability to make well informed decisions. Thus, the continous ability of firms to benefit from increasing high-quality information supply should be leveraged on high investments in technology.

The benefits of using financial information to make decisions that improves the organisation's competitive position is based on the premise that financial information can be analysed in so many different forms and ways. This helps to provide an indication of

trends, patterns, recurrences, forecasts etc., of previous, current and future outcomes (Axson, 2010). Financial information communicates different kinds of external and internal details of the organisation. Firms that are capable of recognising and making use of the revealed details are well positioned to take advantage of makrket opportunities and lure customers from other firms. However, the manor problem of relying on financial information is that it is bound to change any time and this requires that firms to position themselves so that they do not miss on such changes. Hence, a competitive urge can be lost when firms fail to consider and deal with changes in financial information. Axson (2010), recommends that firms must be creative and innovative when devising ways to make the best use of financial information. Meaning, customer trends ansd behaviour can also be predicted by using financial information and thus making it relatively easy for firms to predict consumers' possible or likely behaviour. Hence, gaimning a competitive position is feasible especially when consumer, market and industry examinations are made using the provided financial information.

With all these ideas in mind, it is therefore important to note that information is vital and its existence makes it possible for businesses to make well informed decisions. The development of information is based on the existence of tacit knowldege which organisations must invest so much in. Thus, organisations that have a greater capacity to generate more and sound information can be pressumed to benefit a lot. Such benefits are mainly in the formed of good decisions which enhance both the performance and competitive position of the firm. This will help the firm to survive and expand in the future. Hence, it is eseential to consider information as both a resource and an asset which an organisation must possess so as to make effective decisions. Information enhances the ability or an organisation to take advantage of market opportunities and deal with challenges affecting the firm. This is important espcially in a business and/or economic environment which is characterised by a lot of changes. Changes in both the internal and external business environments provides opportunities for firms to growth as well as challenges which can undermine both the performance and growth of the firm. All these challenges can be averted when managers engage in a transformational process through which new ideas are introduced and effective strategies are formulated and implemented. The implementation of effective strategies will play a vital role of maximising the use of a

firm's assets and resources in a manner that will enhance existing and future profits levels. As a result, the organisation will benefit from an increase in shareholder and organisation value. This in turn will result in the creation of economies of scale which boost productiovity and operational capacity.

1.5.4 Accounting information as an important part of information system

Changes in both domestic and market conditions imposes competitive pressure on firms especially banks. Stability of the financial system and that of the economy are based on the existence of sound economic policies instituted by monetary authorities (Vokshi, 2012). But much of the stability can be attributed to the ability of banks to devise strategies that help them to cushion against the effects of increased market competition. However, both policy makers and managers rely on the existence of good and reliable information when making decisions. There are studies which suggest that accounting information needs to be integrated with information systems (Al-Rawi, 1999; Doll & Torkzadeh, 1992). Such an integration is believed to be capable of making it easy for firms to make quick and effective decisions. This shows that accounting information and information systems are to some extent work hand in hand when making decisions.

The relationship between the use, role and importance of accounting information in information systems is unilateral and can be examined in a number of ways. Firstly, organisations can use information systems to collect information by storing it in databases that are easily accessed by other departmental and/or members (Al-Qaisi, 2004).

Secondly, the stored information needs to be processed timely and in a cost effective way. Thus, information systems provide a way through which organisational information can be processed timely and in a cost effective way.

Thirdly, the procesed information has to be presented in an easily understandable way and information systems makes it feasible to accomplish that. Thus, managers exan take advantage of the benefits of having well advanced information systems to collect, process and present information in a way that is easly understandable by both investors and other stakeholders (Ismail & King, 2007). This helps them to make good decisions. Managers

of the organisation will also benefit from these information systems as they are also able to make good decisions that benefit the organistion on time.

As a result, information systems can be said to be helpful for allowing organisations to communicate information to its users (governments, creditors, investors and other stakeholders). This is important irrespective of the size of the organisation as decisions must be made all the time regardless as to whether they will benefit stakeholders or shareholders or other individuals other thatn these two groups of individuals (Berisha Vokshi, 2012).

Overal, accounting information can be said to important because it enhances the quality of decisions made by firms. The improvement in the quality of decisions are based on the existence of reliable and credible information. Banks and other institutions can thus benefit from such aspects as their performance improves with every successive and good decisions made by the managers. Investors will also gain huge confidence on the firm together with its managers with regards to the preudent use of the organisation's resources and assets. These indicators are bound to improve when good, reliability and credible information is made available. Consequently, the financial system will grow and innovate as more and more individuals build their trust and confidence in the bank managers to deliver. Hence, decision making and accounting information can be said to be important on both social, corporate, sectoral and economic levels.

1.6 Empirical literature review

Lengauer et al. (2016) also did a similar study and outlined that good decisions are not always easy to make and are determined by the existence of certain factors which can warrant easiness and effectiveness. The results showed that having clear and reliable information is essential which implies that these two aspects are essential in ensuring value maximisation.

Siyanbola (2012) did a study that looked at the importance of accounting information in decision making and the established findings strongly contend that accounting information is essential for effective decision making. But the challenge lyes in identifying

ways through which such effectivness can be attained. This study proposes to identify ways through which such effectiveness can be attained thereby enhancing the enterprise value of banks.

Kennedy (2013) conducetd an empirical investigation of the contributions made by computerised accounting among companies listed on the Sri Lankan stock exchange. The sole aim was to deterimine the adequacy and of such a method to detect, correct and prevent security breaches and acts of fraud. The information was drawn from a collection of companies from different sectors of the economy using a total of 118 questionnaires. It was noted that there are significant distinctins between companies using computerised accounting and those who do not. As such, the level of security was discovered to be high among companies using computerised accounting as opposed to companies which those who do not use computerised accounting. Further details also showed that the level of fraud and errors made among companies using computerised accounting were very low. However, it was noted that the adoption of companies computerised accounting does not always provide a best condition for eradicating errors and fraud. As a result, it was recommended that there is much more that is needed to improve the use of computerised accounting among companies using listed on the Sri Lankan stock exchange. The suggested methods recommnded that there be an increase in managerial support and supervision, increased control and monitoring activities.

Kaoud study (2007) did a similar study which was prior to the study by Kennedy (2013) and looked at the role of electronic accounting information system (EAIS) in Palestinian companies. Effort was paid towards looking at the extent to which electronic accounting information system is capable of improving and meeting the desired or expected needs. That is, the implementation of EAIS was posited to aid organisations in performing the required functions. The results showed that the adoption and implementation of EAIS causes organisations to be capable of performing the stipulated activities in an effective and efficient manner. Hence, causing them to meet the given objectives and attain better performance levels. Thus, the use of EAIS was considered to be correlated with increased control, supervision and monitoring. Changes in these aspects were in turn responsbile for major improvements in performance.

Ismail and King (2007) did an assessment of circumstances determining the adjustment of accounting information in Malaysia. The study involved the examination of information collected from 214 manufacturing companies. The study does not address the roles that are played by accounting information but rather deals with issues affecting the use and importance of accounting information. The most important hinderance to the use and effectiveness of accounting information was noted to be managerial approaches used in organisations. The study reckons that there are certain managerial approaches that hinder the usefulness of accounting information. Advice was given to ensure that employees must be gievn enough room to accomplish their organisational golas. As a result, the use of appropriate top and bottom methods was seen as the best possible way of eradicating such problems. The challenge with this study is that it does not give details as to what roles are played by accounting information. Therefore, this study seeks to address such issue.

Al-Rawi (1999) considers that accounting information systems as a set of interconnected methods or parts that are targeted at collecting, processing, classifying and publishing financial results so as to provide details about the organisation in terms of its position and performance. With regards to that, the study by bases its support from a study by Al-Rawi and outlines that AIS should be organised in a way that enhances its ability to provide quality information. It was established that the ability of AIS to provide quality information is determined by the relevance of AIS, its timeliness, form of reporting used to present the AIS together with the reliability of such information. Moreover, decisions makers were noted to determine the usefulness of AIS through the way they perceive the roles and usefuleness of AIS. With regards to that, it therefore becomes important to conduct studies that can examine the roles of AIS. This is what this study seeks to accomplish.

Doll and Torkzadeh (1992) highlighted that the roles of AIS can be examined by looking at ideas that are used to measure the effectiveness of AIS. This was supported by a similar study which was done by Sajady, Dastgir and Nejad (2008) which showed that the determinants of such effectiveness are timeliness, ease of use, format, accuracy and nature of contents of AIS. In addition, it was noted that the benefits of AIS can be weighed by looking at the extent to which they improve the quality of decisions made by firms. This

implies that the roles of AIS are to improve the quality of decisions made by firms which in this case relate to the performance of an organisation. As a result, the roles of AIS to improve the quality of decisions made by firms will be examined by the extent to which they affect the performance of firms in North Iraq. İrrespective of the roles played by AIS, it is important to consider that AIS must assistance in the processing of firms' transactions, boost internal controls and performance evaluation mechanisms, and improve the decision making process. This will help in providing high quality information which enables firms to maintain and boost their competitive positions.

Al-Qaisi (2004) investigated changes in the performance of commercial banks in Jordan attributted to an increase in AlS investment. The argument was that AlS has huge effects on the performance of an organisation but the impacts were considered to be different between organisations. Hence, the same applies to the roles of AlS in banks and hence this implies that the roles of AlS in Erbil banks are more likely to be different from those of other companies in other countries. Hence, it is important to examine how such roles differ. In addition, it was noted that AlS contributes positively and lot towards the development and growth of an organisation. Thus, we can expect that the roles of AlS in the decisions made by banks in Erbil will contribute positively and lot towards their development and growth. That is, we can presume AlS to be positively related to good decisions and an improve in organisational performance. But the reasons are yet to be determined and this study will deal with this issue and outline how AlS results in such benefits.

Al-Khafra (2005) did a study which was relatively similar to this study and the goal was to find ways through which AIS aids in decision making process of governmental institutions in Saudi Arabia. It was noted that the notable role of AIS is to the acquisition and distribution of information (informational roles). The other roles was noted to be decision making and these decisions were related to operation and marketing decisions making purposes. By examining this further, we can establish that the roles of AIS are not limited to informational and decision making roles but also extend to include other roles. These other roles are yet to be determined and this study will help to determine all the necessary roles of AIS especially with regards to banks in Erbil.

A study by Samuel (2013) established that the roles of AIS are mainly restricted to the monitoring of organisational activities, decision making and efficient management. Meaning that we can extend and classifiy these roles intow strategic investment purposes and risk management purposes as well as operation and marketing decisions making purposes. These results in the development of four roles of AIS. This study will thus focus on these roles in banks in Erbil. These roles are relatively different from the roles established by EI-Dalabeeh and AI-Shbiel (2012) based on information collected from hospitals operating under King Abdullah University. The findings simply pointed and emphasised that AIS plays a vital role in the devlopment and growth of a medical institution. This was supported by results obtained in a study by Onaolapo and Odetayo, (2012) in Nigeria. Though the study by Onaolapo and Odetayo focused on construction companies, the findings were almost the same as those established by EI-Dalabeeh and AI-Shbiel (2012) which considered AIS to be important because it contributes towards the devlopment and growth of an institution.

Meanwhile, there are other studies which found out that AIS is useful for organisations to grow and boost their performance but these studies showed that AIS is not related to in anyhow to improvements in performance (Etim, 2011; Ponemon & Nagida, 1990; Soudani, 2012). This suggests that there are challnges which hinder the effective use of AIS in organisations. But the problem is that these studies do not clearly mention the exact nature of such problems. Thus, it remains to be known excatly what these problems are and how best they can be addressed. This study pays attention to these problems and highlights them. This is important as it helps and facilitates the effective use of AIS thereby causing an improvement in the quality of decisions made by banks. This will result in an improvement in bank performance which further stirs an improvement in financial innovation and an increase in the performance of banks

On the other hand, the importance of using AIS in organisation is still being considered to be vast and capable of varing between organisations, sectors and nations (Etim, 2011). A study by Ponemon and Nagida (1990) showed that AIS contributes positively to changes in organisational performance. Meaning that an improvement in AIS results in an increase in organisational performance. The way or channels through which AIS is

able to effect positive changes in organisational performance is decision making. That is, the ability of organisations to make good and high quality decisions related to operation and marketing decisions making purposes, risk management purposes, strategic investment purposes, and information acquisition and provision, is what drives up organistional performance. These roles though not directly imlied have been noted to existence and take a mucvh wider attention in any organisation (Kariyawasam, 2016; Mwakio, 2017). Al-rabei et al. (2015) reiterated the same notion and pointed out that these roles encompass a lot of aspects and will cover elements such as human resources. This was observed to be similar with companies in Turkey (Esmeray, 2016).

The importance of conducting this study can be evident in studies which consider AIS as vital for making good and high quality decisions. For instance, Ng'wandu (2013) AIS results in an increase in the easiness of executing organistional goals and performance of organisational duties. Douglas (2007) established that AIS results in an increase in clarity of of both goals, purpose and vision as well as employees' duties. The importance of AIS in organisation is further linkefd to aspects such as an increase in enterprise value and the rationalisation of decisions made by firms (Okoli & Nnena, 2012). This reinforces the need and importance of conducting this study by examing how AIS affects the decisions made by banks in Northen Iraq.

Based on above, the gaps in these studies have been identified. To be precise, this study is one of the few that examines the roles of AIS in the decision making of banks in North Iraq.

1.7 Conceptual framework

Based on the established insights the study proposed to use the following conceptual framework to examine the role of accounting information in maximsing enterprise value through rationalisation of decisions. It is from this conceptual framework that a regression model was developed.

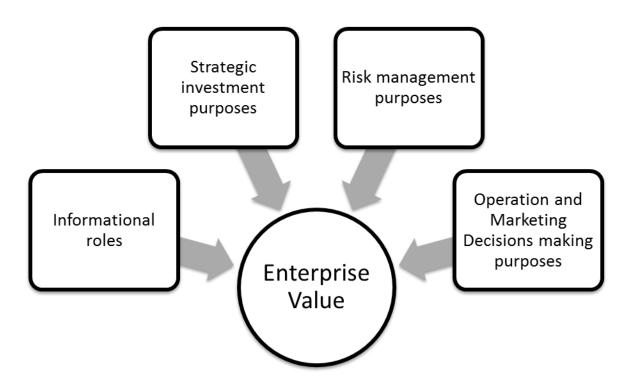


Figure 1.4: Conceptual framework (Source: Author, 2019)

CHAPTER TWO

RESEARCH METHODOLOGY

2.1 Research approach

The study is carried out by examining primary data gathered from Cihan Bank employees in Erbil, North Iraq using questionnaires. A combination of regression analysis methods and descriptive statistics were also used to analyse the collected data. The data were analysed using the Statistical Package for Social Scientists (SPSS) version 23.

2.2 Population and sampling techniques

The study population of this study was comprised of Cihan Bank bottom, middle and top level employees working under the accounting department as well as general employees. As a result, a total of 90 employees were considered to be the study population. The sample size was determined using a formular provided by Cooper, Schindler and Sun (2006) which is provided as follows;

Sample size =
$$\frac{Population}{1 + Population (Margin of Error^2)}$$
 (1)

The margin of error in this study was taken to be 0.05 and this resulted in a 95% confidence interval. Inputting the population size into the above formular as follows;

$$S = \frac{90}{1 + 90(0.05^2)}$$
 (2)

This results in a figure of 73.47 and thus a sample size of 74 employees working for Cihan Bank in Erbil, North Iraq was considered to be appropriate for examining the role of management accounting information in maximsing enterprise value through the rationalisation of decisions.

2.2 Research instrumentation

The questionnaire was developed using a combination of theoretical and empirtical insights that were made by the researcher using existing sources of information. Notable information was obtained from a study by Al-Awsat (2018) and Ullah (2014) to form a good guideline of developing the required questionnaire. However, changes were made to the obtained ideas so as to ensure that the study remains highly valid and reliable in addressing the related research concerns.

The questionnaire was composed of three sections. The first section was concentrated on establishing more details regarding the participants' demographic traits. Information on enterprise value was obtained through the aid of the second part of the questionnaire while the third section focused on establishing the roles of accounting information in banks.

A five-point Likert Scale was also used to determine whether the employees strongly disagreed, disagreed, slightly agreed, moderately agreed or strongly agree about the roles played by accounting information towards enhancing enterprise value.

2.3 Data analysis procedures

The collected findings were analysed using Statistical Package for Social Sciences (SPSS) 23 and the data analysis procedures will included using a combination of regression analysis, descriptive statistics and correlation coefficient tests.

The regression model is based on the assumption that Enterprise Value (**EP**) is a function of strategic investment purposes (SIP), risk management, (RM), informational roles (INFR) and decision making (DM). This can be illustrated using functional notation as follows;

Regression analysis principles were applied to expression 3 and this involved the use of an intercept (α) and the parameters (β_1 to β_6) and an error terms (μ) as shown as follows;

$$EP = \alpha + \beta_1 SIP + \beta_2 RM + \beta_3 INF + \beta_4 DM + \mu (4)$$

The above regression model resulted in the formulation of the undermentioned hypotheses. Thus, the study proposes to test the validity of the following null hypotheses;

- **H**₁: The use of accounting information for strategic investment purposes has no significant positive effect on the enterprise value of banks.
- **H2:** The use of accounting information for risk management purposes has no significant positive effect on the enterprise value of banks.
- H₃: The use of accounting information to obtain and provide organisational information has no significant positive effect on the enterprise value of banks.
- **H4:** The use of accounting information for decision making purposes has no significant positive effect on the enterprise value of banks.

The hypothesis results were obtained from the regression analysis results. Pearson correlation coefficient test was used to examine the correlation between accounting information roles and enterprise value. In addition, tables, charts and figures were used to present the obtained findings.

2.4 Limitations of the study

The major limitation is time and to compensate for time challenges, purposive sampling was used. This also proved to be beneficial because it led to an increase in convinience and feasibility related benefits which made it swift and effective to carry out this study.

2.5 Ethical procedures

The researcher applied for ethical approval prior to carrying this study. The ethical approval was issued by the institution under study and this was part of efforts to ensure that all ethical procedures were upheld. In addition, the researcher issued a written consent to the participants and all the participants freely participated in the study. The researcher also ensured that all the collected information was kept private and not made public without the consent of the participants. In other words, the research was strictly for academic purposes.

CHAPTER THREE

DATA ANALYSIS ANBD PRESENTATION

3.1 Introduction

The findings presented in this study are based on 69 responses collected from Cihan Bank employees in Erbil North Iraq. 74 questionnaires were distributed and 5 questionnaires were not returned. As a result, the response rate of this study is 93.24% and this is extremely high to provide the required details of to examine the role of management accounting information in maximising enterprise value through rationalisation of decisions. The proposed recommendations made in this study are based on the analysis of the 69 responses. The analysed results are presented as follows;

3.2 Demographic analysis

Using information depicted in table 4.1, it can be established that female employees constituted 37.7% as opposed to their male counterparts who consituted 62.3% of the employees who particip[ated in this study. A vast numbver of employees surveyed were in between the age group of 26-33 years while the lowest number of employees was between the age group of 34-41 years. Their respective percenytages were 39.1% and 7.2%. 33.3% of the employees were working under the auditing department, 26.1% under the human resources department, 21.7% under the auditing department and 18.8% under the other departments. Table 4.1he results also shows that the emp; loyees were relatively

well experienced with 56.5% of employees having 6-10 years of experience. Only 39.1% of the employees were experts in IT, 37.7% were still learning while 23.2% were at their intermediate stages of learning how to use IT.

Table 3.1: Demographic analysis

Variable	Description	Count	Percentage
Gender	Male	43	62.3
	Female	26	37.7
	Total	69	100
Age group	18-25 years	17	24.6
	26-33 years	27	39.1
	40-49 years	20	29.0
	34-41 years	5	7.2
	Total	69	100
Department	Auditing	15	21.7
	Human resources	18	26.1
	IT	23	33.3
	Other	13	18.8
	Total	69	100
Work experience	less than 5 years	24	34.8
	6-10 years	39	56.5
	11-15 years	1	1.4
	16 years and above	5	7.2
	Total	69	100
IT expertise	Novice	26	37.7
	Intermediate	16	23.2
	Expert	27	39.1

Total 69 100

3.3 The importance of auditing and information technology to the company

The other secondary aim or objective of the study was to establish the importance of auditing and information technology to the company. The obtained findings are depicted in figure 4.1. It was revealed that there was a high common agreement among the employees that auditing and information technology are very important to the company to a high extent. This is because 40 employees highlighted that auditing and information technology are very important to the company to a high extent. In addition, 20 employees indicated that auditing and information technology are very important to the company to a very high extent. Only 2 employees expressed that auditing and information technology are very important to the company to a moderate extent.

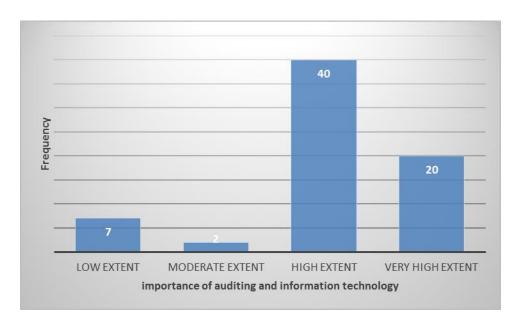


Figure 4.1: The importance of auditing and information technology

3.4 Contributions of auditing towards enhancing departmental effectiveness

Though studies consider auditing to play a vital role of enhancing organisational effectiveness (Lengauer et al., 2016), their contributions towards improving department effectiveness can be subjective. As a result, this study sought to establish the extent to which employees perceive or value the contributions of auditing towards enhancing departmental effectiveness. In overal, the employees can be said to have disagreed that auditing contributes much towards enhancing departmental effectiveness. 30 employees consider auditing to contribute much towards enhancing departmental effectiveness to a very low extent. 29 employees highlighted that auditing contributes much towards enhancing departmental effectiveness to a low extent. Only 10 employees considered the contributions of auditing towards enhancing departmental effectiveness as high to a very high extent.

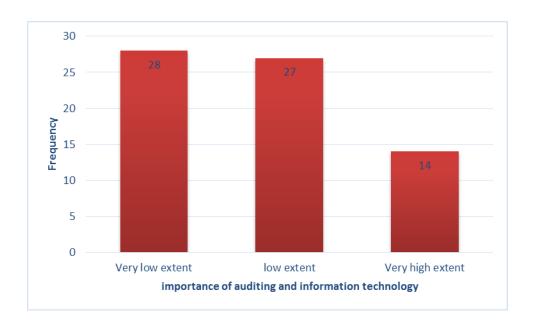


Figure 4.2: Contributions of auditing towards enhancing departmental effectiveness

3.5 Contributions of IT towards enhancing departmental effectiveness

Similar efforts were also placed at determining the contributions of IT towards enhancing departmental effectiveness. The results are shown in figure 4.3 and it can be noted that there is a relatively high combined perception that IT does contribute much towards enhancing departmental effectiveness to a less extent. In total, 41 employees considered IT to be contributing much towards enhancing departmental effectiveness to a low extent. Meanwhile, 28 employees agreed that IT does contribute much towards enhancing departmental effectiveness to a very high extent.

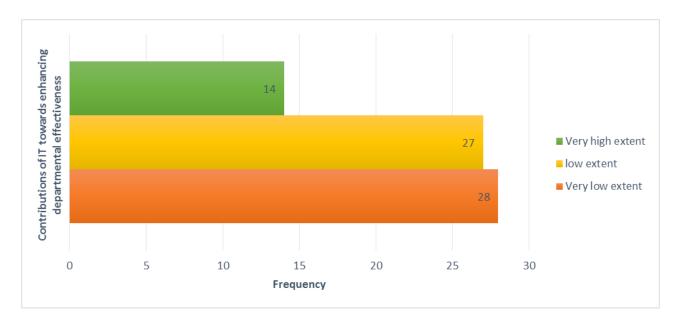


Figure 4.3: Contributions of IT towards enhancing departmental effectiveness

3.6 Organisational areas needing improvements

A study by Siyanbola (2012) revealed that not all strategies can contribute towards improving organisal aspects. As such, those related strategies must be identified and have improvements made to them. It is in this regard that the study revealed that auditing strategies of the bank were in need of major improvements. 49.3% expressed their concern and agreed that IT strategies of bank were in need of major improvements.

Table 4.2: Organisational areas needing improvements

Variable	Description	Count	Percentage
Gender	Auditing	35	50.7
	IT	34	49.3
	Total	69	100

3.7 Correlational coefficient tests

Pearson correlation coefficient test was used to examine how management accounting information aspects were correlated with the rationalisation of decisions made by banks. The obtained results showed that amanagement accounting information aspects were positively correlated with organisational performance. In this case, the retaionalisation of decisions made was reflected by changes in the bank's performance. It can be noted that there is a high positive correlation of 0.90 between decision making and strategic investment. This possibly means that the extent to which investors are in a position to make sound increases following an improvement in an improvement in the quality of decisions made by the bank. Relatively high positive correlations of 0.668 and 0.683 were also established to exist between decision making and organisational performance, between informational uses of management accounting information and organisational performance. The informational uses of management accounting information were established to be lowly and positively correlated with risk management by 0.094. This suggests that other organisational and external information is playing a huge positive role in risk management. Hence, the ability of the bank to manage its risks will increase by insignificant amounts following an increase in organisational information.

Table 4.3: Correlational coefficient test

	Organisational performance	Strategic investment purposes	Risk management	Informational	Decision making
Organisational performance	1				
Strategic investment purposes	0.595*	1			
Risk management	0.144	0.544*	1		
Informational	0.683*	0.402*	0.094	1	
Decision making	0.668*	0.900*	0.425*		1

^{*} significant at 1% significance level

3.8 Model summary

The findings revealed that 63.3% of the extent to which the bank rationalises its decisions (improves its performance as denoted by organisational performance) was accounted by changes in strategic investment purposes, risk management, informational and decision making. This implies that other variables which were not captured by the model were responsible for 36.7% of the changes in the bank's ability to rationalise its decisions.

Table 4.4: Model summary

R ₂	Adjusted R ₂	Std. error	_
0.633	0.610	0.41839	

3.9 Analysis of variance

Analysis of variance (ANOVA) results were used to depict the extent to which the established regression model was significant and free from heterogenous effects caused by outliers. A significant F-statistic of 27.573 was obtained and this implied that the estimated model was significant and free from heterogenous effects caused by outliers.

Table 4.5: ANOVA test

	Sum of squares	Df.	Mean of	F.	Sig.
			squares		
Regression	19.306	4	4.827	27.573	0.000
Residuals	11.203	64	0.175		
Total	30.509	68			

3.10 Regression analysis

The main focus of this study was to examine the roles of management accounting information in decision making. The study establish that the reationalisation of decisions made by the bank relies on information provided by management accounting for Strategic investment purposes, Risk management purposes, Informational purposes, and operational decision making purposes. This was chieved by the application of regression analysis concepts through which organisational performance which considered to be a proxy which measures the extent to which a firm is able to rationalise its decisions.

The findings revealed that an increase in the ability of the bank to use management accounting information for strategic investment purposes has a positive effects on the banks performance. This is because an increase in the ability of the bank to make strategic investment by 1 unit results in an increase in bank performance by 0.174 units. The results are supported by findings made by Kaoud study (2007) which suggests that this is because of having more successfull activities that generate more revenue for the bank.

It can be noted that the use of management accounting information to manage the bank's risks is negatively related with the banks' performance. This is because an increase in the use of management accounting information by 1 unit results in a decrease in bank performance by 0.287 units. The results are in line with findings made by Ismail and King (2007) which suggests that some of the information provided by banks can actually be risks as it reveals to investors and other stakeholders of the bank's position. In addition, the bank to engage in risk aversion activities which causes a decline in investments made by the bank. The bank's revenue will fall and thus denoting a declien a bank performance. This can also possibly as a result of the idea that the information used by the bank to make decisions is possibly not effects and biased and thus causing the bank to make expensive decisions.

On the other hand, it can be noted that the use of management accounting information to provide information to the bank is positively related with the banks' performance. Thus, an increase in the provision of use of management accounting information by 1 unit causes the banks' performance to increase by 0.689 units. These results are in support of findings made by Samuel, (2013) which suggests that the availability of more information allows the bank to make rational decisions which causes its performance to increase.

Table 4.6: Regression analysis test results

	Coefficient	Std. error	t.stat.	Sig.
С	-0.815	0.562	-1.450	0.009
Strategic investment purposes	0.174	0.242	0.721	0.473
Risk management	-0.287	0.192	-1.497	0.139
Informational	0.689	0.130	5.283	0.000
Decision making	0.547	0.258	2.120	0.038

Meanwhile, the use of management accounting information for making operational decisions is positively related to the bank's performance by 0.547. This suggests that an

increase in the bank's ability to make decisions causes its performance to increase by 0.547 units. A study by El-Dalabeeh and Al-Shbiel, (2012) revealed that this is because good decisions can easily be made and thus allowing the bank to take advantage of market opportunities. In overal, management accounting can thus be said to help banks to rationalise their decisions and increase in their performance.

3.11 Reliability tests

The estimated model was sibjected to Cronbach's alpha test so as to determine the internal consistency of the model variables. The decision making criteria considers variables having Cronbach's alpha values that are at least 0.70 as highly reliable (Tavakol & Dennick, 2011). Using information provided in table 4.7, it can thus be included that all the model variables were highly reliable in explaining the role of management accounting in the rationalisation of decisions made by banks in North Iraq. This is because their alpha values were above 0.70 with the least strategic investment purposes having an alpha value of 0.749 and the highest risk management having an alpha value of 0.860.

Table 4.7: Reliability test

Variable	Cronbach's alpha	Consideration
Organisational performance	0.793	Highly reliable
Strategic investment purposes	0.749	Highly reliable
Risk management	0.860	Extremely reliable
Informational	0.817	Highly reliable
Decision making	0.742	Highly reliable

CHAPTER FOUR

CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FUTURE STUDIES

4.1 Conclusions

The main focus of this study was to examine the roles of management accounting information in decision making. The study establish that the reationalisation of decisions made by the bank relies on information provided by management accounting for Strategic investment purposes, Risk management purposes, Informational purposes, and operational decision making purposes.

The findings revealed that an increase in the ability of the bank to use management accounting information for strategic investment purposes has positive effects on the banks performance. This is mainly because of having more successfull activities that generate more revenue for the bank. Such activities can either be in the form of more interests earning activities or an increase in opertaional activities of the bank. Such activities can be more investment projects or through revenue earnning assets which ables the bank to collect revenue by levying charges on these activities. Banks that are able to make more investments in other projects and in increasing their operations are more bound to increase their performance. This is also mainly because their operations are in a greater position to service a lot of customers as opposed to their competitors.

The use of management accounting information by the bank to manage its risks is negatively related by the banks' performance. This is because some of the information provided by banks can actually cause the bank to engage in risk aversion activities which causes a decline in investments made by the bank. As a result, the bank's revenue will fall and thus denoting a decline a bank performance. Furthermore, this suggests that the information used by the bank to make decisions is possibly not effects and biased and thus causing the bank to make expensive decisions. On the other hand, the information used by banks to manage its risks can reveal to investors and other stakeholders of the bank's position. For instance, poor performance can actually signal to investors

The use of management accounting information to provide information to the bank causes an increase in the banks' performance. This is because the availability of more information allows the bank to make rational decisions which causes its performance to increase. This will see the bank investing in good projects and assets which bring in high returns and causing profit margins to increase.

Meanwhile, the study has managed to establish that the use of management accounting information to make operational decisions causes the bank's performance to increase. The underlying reason can be that an increase in the bank's ability to make decisions causes its performance to increase. In addition, good decisions can easily be made which causes the bank to take advantage of market opportunities.

In overal, management accounting can thus be said to help banks to rationalise their decisions and increase in their performance. However, there are cases or situations which can undermine the effective use of management accounting in rationalising decisions made by the bank. As such, these cases or situations need to be identified. Moreover, relying solely on management accounting information to make decisions does not always provide a guarantee that the bank will ratiomnalise its decisions and boost its perfpormance. As a result, there is a greater need to incorporate other strategic aspects when rationalising the bank's decisions.

4.2 Recommendations

In line with the established results, this study thereffore recommends that the following strategies be used by banks to rationalise their decisions;

- Banks need to engage in sound and strategic investment activities by devoting more resources and funds to those activities that bring in more returns for the bank.
- Proper risk management strategies are needed but these strategies must not stop banks from investing in high return projects because their risks levels are high.
 İnstead, high interest rates must be levied to compensate or commensurate with such risk levels.
- Other sources of information and strategies must be used to increase the available information and reinforce the quality of decisions made by the banks.
- İmprovements in tactical, strategic and operational levels of the bank's decision making levels should reinforce each other and orienteted towards one common goal of improving the bank's performance.

4.3 Suggestions for future studies

During the course of the study, it was established that there were considerable diffferences in the use of management accounting information by banks as well as government departments. As a result, future studies can conduct a comparatibve analysis in the use of management accounting information by both private and public sector firms.

REFERENCES

- Aldegis, A. M. (2018). Impact of Accounting Information Systems' Quality on the Relationship between Organizational Culture and Accounting Information in Jordanian Industrial Public Shareholding Companies, International Journal of Academic Research in Accounting, Finance and Management Sciences, 8(1), 70-80.
- Alobaid, H. Y. (2016). Accounting Information Systems of Kuwaiti Companies: Obstacles and Barriers. World Academy of Science, Engineering and Technology, International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, 10(5), 1427-1430.
- Alrabei, A. M. A. (2014). The impact of accounting information system on the Islamic Banks of Jordan: an empirical study. European Scientific Journal, ESJ, 10(4).
- Al-rabei, A. M., Taber, T. A. A., Alaryan, L. A., & Haija, A. A. A. (2015). The Role of Accounting Information Systems in enhancing Human Resources Management Cycle in Jordanian Islamic Banks an Empirical Study. Australian Journal of Basic and Applied Sciences, 9(20), 437-441.
- Alshaefee, A.A.G.H., (2007). Accounting Information Systems and Its Application in Petroleum Companies in Yemen, Ph.D. Thesis. Pune University. India.
- Al-Shara. A. H. K. (2014). A Study Of Impact Of Accounting Information Systems Of Efficiency And Performance Of Banks (With Special Reference to selected Indian and Iraqi banks), Ph.D. Thesis, Dr. Babasaheb Ambedkar Marathwada University. India.
- Amin, M. K., Munira, S., Azhar, A., Amin, A., & Karim, M. T. (2016, December). Factors affecting employees' behavioral intention to adopt accounting information system (AIS) in Bangladesh, In Computer and Information Technology (ICCIT), 2016 19th International Conference on (pp. 501-505). IEEE. Annual report (2013). Central Bank of Yemen.
- Barney, J. B. (1995). Looking inside for competitive advantage. Academy of Management Perspectives, 9(4), 49-61.

- Bell, E., Bryman, A., & Harley, B. (2018). Business research methods. Oxford university press.
- Berisha, V. N. & Xhelili K. F. (2017). Role of Accounting Information in Decision-Making Process, the Importance for its Users ENTRENOVA Conference Proceedings. Available at SSRN: https://ssrn.com/abstract=3282577.
- Bodnar, G. H., & Hopwood, W. S. (2013). Accounting information systems (11th ed.). Pearson Ed.
- Boyd, L. H., & Cox Iii, J. F. (2002). Optimal decision making using cost accounting information. International Journal of Production Research, 40(8), 1879-1898.
- Buljubašić, E., & Ilgun, E. (2015). Impact of Accounting Information Systems on Decision Making Case of Bosnia and Herzegovina. European researcher. Series A, (7), 460-469.
- Checon, B. Q. (n.d.). Limited attention, the use of accounting information and its impacts on individual investment decision making. doi:10.11606/t.12.2018.tde-24082018-153805.
- Collier, P. M. (2015). Accounting for managers: Interpreting accounting information for decision making. John Wiley & Sons.
- Cooper, D. R., Schindler, P. S., & Sun, J. (2006). Business research methods (Vol. 9). New York: McGraw-Hill Irwin.
- Courtney, J. F. (2001). Decision-making and knowledge management in inquiring organizations: Toward a new decision-making paradigm for DSS, Decision Support Systems, 31, pp. 17–38.
- Dana, L. P., & Dana, T. E. (2005). Expanding the scope of methodologies used in entrepreneurship research. International Journal of Entrepreneurship & Small Business, 2(1), 79-88.

- EI-Dalabeeh, A., & Al-Shbiel, S. O. (2012). The role of computerized accounting information systems in reducing the costs of medical services at King Abdullah University Hospital. Interdisciplinary Journal of Contemporary Research in Business, 4(6), 893-900. Retrieved from http://connection.ebscohost.com/c/articles/85817913/role-computerized-accounting-informationsystems-reducing-costs-medical-services-king-abdullah-university-hospital on 23/08/2019.
- Esmeray, A. (2016). The Impact of Accounting Information Systems (AIS) on Firm Performance: Empirical Evidence in Turkish Small and Medium Sized Enterprises. International Review of Management and Marketing, 6(2), 233-236.
- Etemad, H., Wilkinson, I., & Dana, L. P. (2010). Internetization as the necessary condition for internationalization in the newly emerging economy. Journal of International Entrepreneurship, 8(4), 319-342.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American journal of theoretical and applied statistics, 5(1), 1-4.
- Etim, E. O. (2011). Enhancing the efficiency of accounting information system in organizations. International Journal of Economic Development and Investment Research, 2(2).
- Ghorbel, J. (2017). A Study of Contingency Factors of Accounting Information System Design in Tunisian SMIs. Journal of the Knowledge Economy, 1-30.
- Gill, A., Dana, L. P., & Obradovich, J. D. (2018). Financial risk management and financial performance of new small business ventures: evidence from Indian survey data. Journal for International Business and Entrepreneurship Development, 11(2), 75-95.
- Granlund, M., & Teittinen, H. (2017). Accounting Information Systems and decision-making. The Routledge Companion to Accounting Information Systems, 81-93. doi:10.4324/9781315647210-7
- Haddad, & Atmeh. (2009). Accounting information system (1st ed.). Amman: Al Mareekh.
- Haleem. A. (2016). The Impact Of Ais In Decision Making Process In Government Departments. EPRA International Journal of Economic and Business Review, Vol.4, Issue 4, 58-64.

- Hanifi, F., & Taleei, A. (2015). Accounting information system and management's decision making process. Management Science Letters, 5(7), 685-694.
- Heidhues, E. & Patel, C. (2019). The Role of Accounting Information in Decision-Making Processes in a German Dairy Cooperative. Available at https://www.researchgate.net/publication/228344526_The_Role_of_Accounting_Information_in_Decision-Making_Processes_in_a_German_Dairy_Cooperative.
- Hunter, I., Saunders, J., & Constance, S. (2016). HR business partners. Routledge.
- Jawabreh, O. A., & Alrabei, A. M. (2012). The impact of accounting information system in planning, controlling and decision-m Malhotra, N. K. (2004). Marketing research. New Jersey, NJ: Prentice Hall.
- Markus, M.L. and Pfeffer, J. (1983), "Power and the Design and Implementation of accounting and Controlling Systems", Accounting, Organisation and Society, Vol. 8, No.2 –3, pp. 205-218.
- Mayr, A., Lengauer, V., & Parasote, S. (2006). The impact of accounting information on management's: Wexiödisk-A case study.
- Mia, L. and Chenhall, R.H. (1994), "The Usefulness of Management Accounting Systems, Functional Differentiation and Managerial Effectiveness", Accounting Organisation Society, Vol. 19, pp. 1 –13
- Millo, Y., Barman, E., & Hall, M. (2016). Accounting measurement tools and their impact on managerial decision making. economic sociology_the european electronic newsletter, 17(2), 17-23.
- Mwakio. S. (2017). The Relationship Between Accounting Information System and Human Resource Management Among Commercial Banks in Kenya, Master Thesis, University of Nairobi.
- Ngwandu, P. (2009). The Impact of Financial Statements in Decision Making process in Tanzania Revenue Authority Dar es Salaam Region. Mbeya.

- Nicolaou, A. (2000). A Contingency Model of Perceived effectiveness in Accounting Information System: Organisational Coordination and Control Effects", International Journal of Accounting Information Systems, Vol. 1, pp. 91-105.
- Nicolaou, A. I. (2000). A contingency model of perceived effectiveness in accounting information systems: Organizational coordination and control effects. International Journal of Accounting Information Systems, 1(2), 91-105.
- Okoli, M. N. (2012). How effective and efficient the instrument of good accounting information is in decision making in an organization. Master thesis, Nzumbe University.
- Onaolapo, A. A., & Odetayo, T. A. (2012). Effect of accounting information system on organisational effectiveness: a case study of selected construction companies in Ibadan, Nigeria. American Journal of Business and Management, 1(4), 183-189.
- Otley, D. (1980), "The Contingency Theory of Management Accounting: Achievement and Prognosis", Accounting Organisation and Society, Vol. 5, pp. 194 -208. PAT. (2002), "Accounting Standards volume II",
- Ponemon, L. A. & Nagoda, R. J. (1990). Perceptual variation and the implementation of accounting information systems: An Empirical investigation. Journal of Information System, 4(2), 1-14.
- Rabei, M. & Abutaber, T., Alaryan, L. & AbuHaija, A. (2015). The Role of Accounting Information Systems in enhancing Human Resources Management Cycle in Jordanian Islamic Banks an Empirical Study. Australian Journal of Basic and Applied Sciences. 9. 437-441.
- Rahman, K. Z. (2016). Accounting Information System as a Strategic Decision Making Tool in Banking Sector: Evidence from Bangladesh. Asian Business Review, 6(2), 79-84.
- Ramly, F. (2011). Computerize Accounting Information System. Decision making, 16(1), 12-31.
- Randhawa. G. (2007). Human Resource Management. Atlantic Publishers and Distributers (P) Ltd.

- Romney, M. B., Steinbart, P. J. (2016). Accounting information systems (14th ed.). New York: Pearson.
- Romney, M. B., Steinbart, P. J., Mula, J. M., McNamara, R., & Tonkin, T. (2013). Accounting Information Systems [1st Australasian edition]. Pearson Australia.
- Saeidi, H. (2014). The impact of accounting information systems on financial performance—a case study of TCS—India'. Indian Journal of Fundamental and Applied Life Sciences, 4(4), 412-417.
- Sajady, H., Dastgir, M., & Nejad, H. H. (2012). Evaluation of the effectiveness of accounting information systems. International Journal of Information Science and Management (IJISM), 6(2), 49-59.
- Salehi, M., & Abdipour, A. (2011). A study of the barriers of implementation of accounting information system: Case of listed companies in Tehran Stock Exchange. Journal of Economics and Behavioral Studies, 2(2), 76-85.
- Samuel, N. (2013). Impact of accounting information systems on organizational effectiveness of automobile companies in Kenya (Master theses, University of Nairobi).
- Singh, A. K. (2000). Accounting Information System for Human Response Management. Delhi Business Review, 1(2).
- Siyanbola, T. T. (2012). Accounting information as an aid to management decision making. International Journal of Management and Social Sciences Research (IJMSSR) ISSN, 2319-4421.
- Somolu, Lagos.Simon, R. (1987). Accounting Control Systems and Business Strategy: An Empirical Analysis. Accounting Organisation Society, vol. 12.
- Soudani, S. N. (2012). The usefulness of an accounting information system for effective organizational performance. International Journal of Economics and Finance, 4(5), 136.

- Speier, C., Valacich, J. S., & Vessey, I. (1999). The influence of task interruption on individual decision making: An information overload perspective. Decision Sciences, 30(2), 337-360.
- Swalhah, A. (2014). The role of Accounting Information Systems (AIS) in rationalized Administrative Decision-making. Interdisciplinary Journal of Contemporary Research In Business, 6(1).
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. International journal of medical education, 2, 53.

LIST OF APPENDICES

Appendix 1: Research questionnaire



Dear Respondent

This questionnaire is in partial fulfilment of the requirements of the MSc in Accounting and Finance at Near East University. It seeks to establish the roles of auditors using ideas drawn from a case study of commercial banks. This study is strictly for academic purposes. kindly note that all the information given herein will be treated with total confidence.

Kindly take time to complete the questionnaire by providing information in the given spaces.

Thank you very much for your valuable time.

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SECTION A: RESPONDENT PROFILE

Please tick where appropriate $\boldsymbol{\vee}$

1. What is your gender? Please tick where	appropriate.
Male	
Female	
2. What is your age group? Please tick wh	ere appropriate.
18-25 years	
26-33 years	
34-41 years	
42-49 years	
50 years and above	
3. Name of department. Please tick where Auditing	appropriate.
Human Resources	
Information Technology	
Marketing	
Other	
4. How many years have you been working	g for this company? Please tick where
appropriate.	
less than 5 years	
6-10 years	
11-15 years	
16 years and above	

5. IT expertise.	
Novice	
Intermediate	
Expert	
6. To what extent do you consider auditing	and information technology vital for
your company? Please tick where appropr	iate.
Very low extent	
Low extent	
Moderate extent	
High extent	
Very high extent	
7. To what extent does auditing contribute	to the effectiveness of your
department? Please tick where appropriate) .
Very low extent	
Low extent	
Moderate extent	
High extent	
Very high extent	
8. To what extent does information technology	ogy contribute to the effectiveness of
your department? Please tick where appro	priate.
Very low extent	
Low extent	
Moderate extent	
High extent	
Very high extent	

9. Between auditing and information tech	nnology, which do you think needs a lot
of improvements? Please tick where app	ropriate.
Auditing	
Information technology	

SECTION B: ROLES OF AUDITORS AND INFORMATION TECHNOLOGY

This section seeks to obtain information about the roles of auditors and information technology. Please indicate the extent to which to agree or disagree by ticking on only one number option for each of the items or statement on the table below:

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

	Strategic investment purposes	1	2	3	4	5
10	Information technology together with audit assist the organisation to make					
	important strategic investment decisions.					
11	The ability of the company to make rational investment decisions is based on					
	the availability and effective use of auditing and information technology.					
12	Investment activities are significantly audited as compared to other					
	organisational activities.					
13	The organisation invests a lot of money towards acquiring information					
	systems that enhance the effectiveness of the firm's investment decisions.					
14	Auditors and information technology specialists are involved in making					
	strategic investment decisions.					
15	Top managers rely a lot on the roles of auditors and IT specialists.					
16	Investment managers have access to all the necessary audit reports.					
	Risk management purposes					
17	Information technology enhances the organisation's ability to manage its					
	risks.					
						ı

18	Risks of fraud are easily prevented by having good auditors and Information			
	technology systems			
19	The risk or making errors is easily reduced by having good auditors and			
	Information technology systems			
20	Investors can minimise their risks by using Information technology audit			
	reports.			
21	Risk management activities of the company also include maximizing the use			
	of the organisation's resources.			
22	Information technology significantly contributes towards enhancing the			
	organisation's risks management capabilities.			
23	The organisation's activities are realigned in line with the organisation's risks			
	management policies.			
		l		

	Informational purposes	1	2	3	4	5
24	Auditors through the use of information technology help to collect important financial information.					
25	Important financial information obtained from the audit activities can easily be processed for a better management of the company.					
26	Information technology makes it easy to distribute audit and non-audit information to all the departments of the organisation.					
27	The organisation has an effective and timeous ability to collect, process and distribute of a lot of information at the same time.					
28	All the departments of the organisation have an easy access to the required organisational information.					
29	Information technology reduces time in generating audited financial statements					
30	Information technology might improve quality of reports					
	Decision making purposes					

31	Auditors through the use of information technology assist in making important		
	capital raising decisions.		
32	Organisations are more capable of making good financing and investment		
	decisions.		
33	Organisations rely a lot on the use of auditors and information technology to		
	decide on when to repay back borrowed loans.		
34	Information technology audit reports can be used to make evaluate an		
	organisation's short- and long-term decisions.		
35	Information technology audit reports can be used to make decisions about		
	the long run performance of the organisation.		
36	Information technology and the role of auditors contribute towards the		
	attainment of an organisation's objectives.		
37	Decisions about the effective and efficient use of organisational resources		
	are rationally made based on information technology audit reports.		
	Organisational performance		
	Organisational performance		
38	Auditing and IT help to enhance the financial performance of the company.		
39	Auditing and IT help to reduce the inefficient and ineffective use of resources.		
40	There is a reduction in activities that reduce the organisation's performance.		
41	Auditing and IT help to enforce good ethical practices among workers		
42	The organisation's has a better corporate social performance.		
43	The organisation has better time management practices.		
44	Each department is meeting set organisation standards.		
45	Employees are accomplishing set standards and fulfilling their purposes.		

SIMILARITY INDEX

THE ROLE OF MANAGEMENT ACCOUNTING INFORMATION IN MAXIMISING ENTERPRISE VALUE THROUGH RATIONALIASATION OF DECISIONS NINA HASSAN

ORIGIN	ALITY REPORT					
8 _% 3 _% 1 _% 7 _%						
SIMILA	ARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS		
PRIMAR	Y SOURCES					
1	Submitte Student Paper	d to Cyprus Inter	rnational Unive	ersity 2		
2	COMMUN Internet Source	ity.vanguardngr.	com	1		
3	Submitte Student Paper	d to Eiffel Corpo	ration	1		
4	Submitte Student Paper	d to Morgan Sta	te University	<1		
5	Submitte Student Paper	d to Anglia Rusk	in University	<1		
6	Submitte Student Paper	d to CVC Nigeria	a Consortium	<1		
7	Submitte Student Paper	d to University o	f Leicester	<1		
8	Submitte Student Paper	d to University o	f Essex	<1		
9	Submitte Student Paper	d to University o	f Mary	<1		

ETHICAL APPROVAL FORM



BİLİMSEL ARAŞTIRMALAR ETİK KURULU

13.01.2020

Dear Nina Hassan

Your application titled "The Role Of Management Accounting Information In Maximising Enterprise Value Through Rationalisation Of Decisions." with the application number YDÜ/SB/2020/567 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Assoc. Prof. Dr. Direnç Kanol

Direnc Kanol

Rapporteur of the Scientific Research Ethics Committee

Note:If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.